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FIRST SESSION

FRIDAY, MAY 18, 1951—9:30 A. M.

Main Ballroom, Neil House

Introductory Remarks:

C. WELDON BARSTOW, *President, The Ohio Society of Certified Public Accountants; Trout and Barstow, Dayton.*

Address: "Pension Plans—Installation and Maintenance"

GEORGE G. MAIN, *Treasurer, Westinghouse Electric Corporation, Pittsburgh, Pennsylvania.*

Address: "Managerial Accounting"

WILLIAM J. VETTER, *University of Chicago, Chicago, Illinois.*

INTRODUCTORY REMARKS

CHAIRMAN BARSTOW: On behalf of the Department of Accounting and the College of Commerce and Administration of the Ohio State University, I have the pleasure and privilege of welcoming you to this Thirteenth Annual Institute on Accounting. These meetings have always attracted the interest of many groups of students, practicing Public Accountants, and business men, and there are always representatives in the audience from the American Accounting Association, American Institute of Accountants, American Society of Women Certified Public Accountants, Controllers Institute of America, Institute of Internal Auditors, National Association of Cost Accountants, and the Ohio Society of Certified Public Accountants.

Prior to the inauguration of the present series of Institutes on Accounting, the Ohio Society of Certified Public Accountants in 1920 started holding annual spring meetings on the Ohio State University campus with programs and business meetings. For the most part, programs in those days were arranged by the University faculty in the Department of Accounting. These spring meetings of the Ohio Society of Certified Public Accountants on the campus of the Ohio State University, together with the present series of thirteen annual Institutes constitute a continuous activity of this character, now running consecutively over some 32 years. The thirteen annual meetings of the enlarged Institute on Accounting constitutes a laudable record, and it probably would be hard to find an equal anywhere.

The record of these meetings is substantial and will be found in libraries throughout the land where material dealing with accounting is complete. Twelve Proceedings have now been published and distributed. Not only have they been sent to libraries but they have also been furnished to all persons who have attended in various years as well as to many others who have made request even though unable to attend the meetings.

Inauguration of the Accounting Hall of Fame last year marked a new venture which has become an integral part of these annual Institutes on Accounting. This Accounting Hall of Fame carries a marked distinction particularly because of the high character and attainments of the forty-five outstanding members of the Board of Nominations. It is certain that no other Accounting Hall of Fame exists with such a distinguished group to pass upon the qualifications of those who are awarded the honor of election to this Accounting Hall of Fame.

We are very fortunate this morning in having two outstanding speakers to address us on very interesting subjects. George G. Main joined the Westinghouse Electric Corporation 25 years ago as a clerk. Advancing through the company's financial organization, he was elected Treasurer March 30, 1949. Born in Avalon, Pennsylvania, he received his education in Pittsburgh schools, and in 1926 he received his Bachelor of Science degree in business administration from the University of Pittsburgh. Joining Westinghouse that same year, he first was employed as a clerk in the manufacturing department at East Pittsburgh.

In 1934, Mr. Main was transferred to the office methods division at the Pittsburgh office and was named manager of that division in 1937. The following year he was transferred to the President's staff, and in 1941 was appointed assistant director of financial accounts division of the accounting department. In 1943 he was made manager of accounting at the Westinghouse Lamp Division, Bloomfield, New Jersey. Later that year he was transferred to the Controller's staff at Pittsburgh.

In 1945 Mr. Main became assistant treasurer and credit manager, which was the position he held until his election as Treasurer of the company in 1949.

The Westinghouse executive is a member of Omicron Delta Kappa, honorary fraternity; Beta Gamma Sigma, business fraternity; and Lambda Chi Alpha, social fraternity. He is a trustee of the East Liberty Presbyterian Church; director of the Community Chest of Allegheny County; director and treasurer of the Westinghouse Educational Center; trustee of the Westinghouse Electric Annuity Trust; and member of the National Association of Credit Men.

He also belongs to the Duquesne Club, University Club and Longue Vue Country Club.

Mr. Main will address us on the subject of "Pension Plans—Installation and Maintenance." Mr. Main.

PENSION PLANS—INSTALLATION AND MAINTENANCE

By GEORGE C. MAIN
Treasurer, Westinghouse Electric Corporation, Pittsburgh, Pennsylvania

Accountants should have a very keen interest in the pension plans of their companies. That interest should not be only an interest in the benefits that the plan will provide for them as individuals, but should be an aggressive interest in every detail of the plan. Accountants should play an important part in the design of pension plans, and should assist in the development of such plans. There are three reasons why this is so.

First, the cost of a pension plan is substantial. It will involve continuing expenditures over a long period of time. The new pension plan adopted by Westinghouse in recent months will cost the company annually an amount in excess of the depreciation charges on our fixed assets last year. Accountants spend a great deal of time and have a vital interest in the depreciation rates charged on buildings, machinery, and tools. Certainly they must have as much interest in another item involving an even larger amount of cost.

Second, the amount of money that will be accumulated to pay for the pensions will run into very substantial figures. A forecast indicates that in not much over 10 years the pension trust funds created in connection with the Westinghouse Pension Plan will have assets in excess of the book value of all of the present fixed assets of our company. The eventual size of these pension trust funds may well approach the present amount of capital and surplus of the company. Accountants for any company should be vitally interested in any company operation involving such sums of money.

Third, the Accounting Department will be called upon to establish and maintain most of the records on which pensions will be based. Many of the details of administering the plan will fall upon the Accounting Department. It is important, therefore, to the Accountant to see that the pension plan established is one that can be operated to the satisfaction of the company and its employees and without unnecessary and costly work.

The actuarial and administrative problems of operating a pension plan of a corporation (or any business, for that matter) are created at the time the plan is designed and developed. It is in the development stage of a pension plan that the problems of administration can be most effec-

tively solved. If the plan is designed with the problems of administration in mind, many problems can be eliminated before they occur. It has been said, and properly so, that the development and negotiation of a pension plan are the writing of the rules. Thereafter, the operation of the plan is playing the game in accordance with those rules.

On April 25, 1949, the United States Supreme Court refused to review the decision of the Circuit Court of Appeals in the Inland Steel case and thereby established that pensions are a proper subject for collective bargaining. Since that time, the design and development of pension plans have been influenced by the need to negotiate the plans with unions. It is no longer possible to develop and work out the final details of a pension plan in an orderly and considered manner. Often the details of the plan are finally concluded during midnight sessions at the bargaining table. Certainly any company going into collective bargaining on pensions should have spent much time studying and analyzing the problems and should know what type of program it is willing to agree to in negotiations. Weeks, and even months, of planning should be done before bargaining commences. And in spite of all advanced planning, labor negotiations have a tendency to be concluded at the eleventh hour under much pressure.

The accountant should be on hand at these collective bargaining sessions to protect the company's interest. He should be there to make sure that no last minute concessions will involve amounts of money not anticipated by management's representative, or will cause administrative complications that will result in unreasonable amounts of work when the plan it put into practical operation.

Probably no single event has had such widespread influence on pension thinking during the past two years as the Steel Fact Finding Board's Report. This report was made to the President of the United States on September 10, 1949. As you know, this report, among other things, recommended that the steelworkers be granted a non-contributory pension plan, the cost to the company not to exceed $120 per year per employee, 6¢ per hour per employee. The Steel Fact Finding Board estimated that such contributions would provide a pension of $70.00 per month which, together with Social Security benefits as they existed at that time, would bring the combined pension up to $100 per month. While the estimates of the amount of pension that could be provided for such cost have clearly been proved inaccurate, the recommendation that employees receive pensions of $100 per month, including Social Security, established a pattern that has been followed as a minimum in many industries. The recommen-

dation that a non-contributory plan be established has reversed a previous trend toward contributory pension plans. Practically every major company that has adopted a pension plan during the past year and a half has established that plan on a non-contributory basis.

From an administrative standpoint, the most important result of the Steel Fact Finding Board's Report was the tying together of company pensions and Social Security. Previously, practically all company pension plans provided benefits which were entirely separate from and in addition to Social Security benefits.

The establishment of pensions including Social Security, while not original with the Steel Fact Finding Board, gave the unions a larger figure to talk about than would have been the case of a plan which provided benefits in addition to Social Security. The $100 a month pension idea had sales appeal to the unions and the union membership. It was a simple formula easily understood by the membership and would even fit on pickets' placards. The unions, therefore, went all out for a flat pension benefit including Social Security benefits.

When the Steel Fact Finding Board made its report, the 1950 modifications of the Social Security Law were already beyond the development stage. It was almost a foregone conclusion that Social Security benefits would be increased. Companies could adopt a pension plan providing a benefit of $100 a month, including Social Security, with reasonable certainty that their direct pension costs would be reduced by the probable increase in Social Security benefits.

While the tying of company pensions and Social Security into one package was desirable both from the union's standpoint in selling their members on the plan that they had been able to negotiate, and from the company's standpoint since a reduction in cost by increased Social Security benefits could be anticipated, it materially complicated administration of company pension plans. It is necessary under such plans to determine the amount of benefits that an employee receives from the Government. Generally, such benefits cannot be ascertained until sometime after the employee has retired, and it is therefore necessary in most companies that Social Security benefits either be calculated based on the employee's earnings record maintained by the company, or that the employee's benefits be estimated pending the receipt by the employee of his official certificate of award from the Social Security Administration. In operating the Westinghouse Pension Plan, we estimate the employee's Social Security benefits based on his earnings as shown on the company's records.

We deliberately estimate the Social Security payment a dollar or two a month higher than we actually believe it will be. The pension payment from the company is started on the date the employee retires on the basis of this estimate. Since we have estimated the Social Security benefit on the high side, the payment from the company is somewhat low. When the employee receives his official certificate of award and sends it to us, we recalculate his pension accurately and make the necessary adjustments in the pension benefits. While this is a great deal of work, we believe that it is justified. A monthly pension of $1.00 has a present value of approximately $150. We often find that a retired employee has had earnings outside of the company and that his Social Security benefit is a dollar or two a month more than we had anticipated on the basis of the earnings as shown by our records. The savings that result from accurately determining the pensions due far exceed the cost of starting the pension at one rate and later adjusting it to the accurate amount.

I would like to review for you today some of the features of the pension plans that have been adopted by major companies during the past year or two, and point out some of the administrative problems and problems in connection with the funding of those plans. As a result of labor negotiations, many companies have made certain commitments as to pension benefits and as to providing the funds with which to pay those pension benefits.

If the Pension Agreement with the union calls for the funding of pension benefits, it is necessary to determine actuarially the liability for those pension benefits. It is necessary to determine the amounts that the company is required to deposit into a pension fund in order to meet the requirements of the contract with the union. One large steel company has the following provision in its contract with the union:

The company is free to determine the manner and means of making provisions for funding and paying the pension benefits set forth in this Agreement.

Under such an agreement, the company could decide to make no advance funding of the pension benefits whatsoever. It could pay all of the pension payments directly out of company funds without the establishment of any insurance contracts or trust agreements. Such a provision would require that no records be maintained for the actuarial calculations required by the plan.

Another steel company has the following provision in its contract with the United Steelworkers:

The Corporation shall make payments into a pension trust which shall be sufficient on a sound actuarial basis to fund the pensions granted during each calendar year

over a period of five years beginning with and including the year in which the pensions were granted.

Under this type of funding requirement, it would not be necessary to develop any data for the actuary until an employee has reached his normal retirement date and has retired. It would then be necessary to calculate the amount that should be deposited into the trust fund to fund the pensions over a period of five years following the employee's retirement.

The funding requirement of our own plan is similar to that of the companies in the automobile industry. The Westinghouse Pension Plan contains the following provision:

> The company intends to fund this Plan by making contributions to the trustee or trustees or by paying such premiums under any insured contract or contracts for the purpose of providing pensions under the Plan which will be sufficient to fund under accepted actuarial principles the pensions accruing under this Plan for service after its effective date. In addition, the company intends to make payments each year which, if continued, would fund the total liability under this Plan for service prior to the effective date over an assumed period of 30 years.

The plan further states that the company has the right to accelerate the funding, and if the company has accelerated the funding, it may in future years reduce the rate of funding.

The Pension and Insurance Agreement entered into with a number of unions representing Westinghouse employees has this provision:

> The company agrees that during the term of this Agreement it will not discontinue the Pension Plan nor suspend or reduce the payment of company contributions to the Plan below the basis set forth as its intention in the Pension Plan.

Any plan that requires the funding of pensions prior to the time an employee retires necessitates the maintenance of complete records of the employees who may in the future be eligible for pension benefits. Such a plan also requires that complete actuarial evaluations be made at regular intervals to determine the amount of money that must be set aside in order to fund those benefits.

I would like to digress for a moment and point out why Westinghouse was willing to include in its contract with the union a provision requiring that it fund currently each year prior to retirement the benefits accruing under the Pension Plan, as well as to liquidate the liability that has accrued under the plan for service prior to the effective date of the plan. In my opinion, the only sound method of accounting for the cost of a pension plan is to pay the cost of that plan in the year in which the cost is incurred. As you have seen, we are required by our union contract to do just that. We have created two trust funds with two banks into which the amounts necessary to fund the Pension Plan are being paid.

The payments into the funds are deductible for Federal income tax purposes, and the interest earnings on those funds are not taxable to the trust funds. From a tax standpoint alone, particularly in the present period with excess profits taxes involved, there are material advantages in favor of soundly financing a pension plan. A soundly financed pension plan also gives greater security to the employees. Each employee knows that money is being set aside during his working lifetime to provide his pension when he retires. The company with a soundly financed pension plan will find that its pension costs are geared more closely to the company's own business activity. In periods of retrenchment, the cost of the pension plan will normally tend to reduce in nearly direct proportion to the reduction in pay roll, and if advanced funding has been done with respect to past service liabilities, the cost of the pension plan in periods of retrenchment can be reduced even further. A company that operates a pension plan on a pay-as-you-go basis finds that it is faced with an ever-increasing pension load, and that in periods of low business activity, employees are apt to be retired at a faster rate, thereby materially increasing the cost of the pension plan at a time when the company can least afford the increased cost.

Some companies have provisions in their union contracts which require them to put up in full the actuarial value of the pensions at the time the employee retires. No advanced funding is done until the employee retires. Then the full cost of the pension must be laid on the line. Some companies following this policy have no fixed retirement age in their pension plan. I am sure you can see what is liable to happen to the cost of such a pension plan when business conditions change.

In periods of high business activity when there is a shortage of manpower, all employees will be encouraged to stay on the job beyond the permissible retirement age. The cost of the pension plan will be low. When retrenchment starts and employees are being laid off and those remaining on the roll are working only two or three days a week, there will be a different attitude toward retirement. The older employees will find it more attractive to retire and the younger employees will put pressure on older employees to retire. The company will be faced with the problem of paying many times its normal pension cost during periods of declining business activity.

A company that is following the policy of funding the pension benefits for each year of service as that service is rendered must, of course, maintain more detailed records for use in the actuarial evaluation of the liabilities and for the determination of the amounts to be paid to the trustees or

insurance company. The amount of information that must be maintained depends largely on the provisions of the pension plan. For example, the plans for the hourly-rated employees in the automobile companies are a direct function of length of service with the company. Under this type of plan, the toolmaker and the janitor having the same length of service would be entitled to the same pension. In the automobile industry most of the companies found it necessary to write in a detailed definition as to what constituted a credited year of service. One company, for example, gives credit for one year of service to an employee who works 1,800 or more hours in any one year. An employee working between 1350 but less than 1800 hours receives three-fourths of a year's credit, and an employee working 975 but less than 1350 hours receives credit for half of a year's service. An employee working 560 but less than 975 receives one-fourth of a year's credit, and an employee working less than 560 hours in any year receives no credit for that service.

Another company gives credit for a full year of service for anyone working 1700 or more hours in a year and proportionately less credit in multiples of one-tenth of a year for employees working less than 1700 hours in a year. I believe you will visualize from the provisions of these two companies' plans that a detailed record of the number of hours worked in each year by every hourly employee on the pay roll must be maintained in order to properly determine the pension.

In the steel industry, pensions are based on service and earnings. The average annual earnings of an employee during his last ten years of employment with the company are used to determine his pension benefits. Accordingly, it is necessary only to maintain records of earnings during the ten years immediately prior to retirement. If a company is to fund pension benefits currently under such a plan, it is necessary to have information as to each employee's earnings each year and then to project by use of a salary scale what that employee's earnings will be during his last ten years of employment. This introduces some very interesting actuarial problems and also introduces some very great possibilities for error in the computation of the liabilities under a pension program.

The actuary employed to calculate the cost of a pension plan has no occult or omniscient power which can tell him what the future will hold in the way of further inflation or further general increases in wage rates. The salary scales used by actuaries to forecast future earnings of employees in the 1930's did not and could not have anticipated the inflation that has occurred in the past several years. A company that had a plan based on

the final ten-year average earnings during the 1930's has now found that the liability for service rendered prior to the inflation that we have had was materially undervalued at the time the service was rendered.

The liability for such service may have doubled in the last ten years because of the increase in wage rates. If you have a plan under which benefits are based on earnings during a final period of service, you are probably aware of the problem of accurately forecasting earnings at the time of retirement. If you have not carefully studied the tables used by the actuary to forecast future earnings, you would do well to review those tables and determine in your own mind whether or not they are satisfactory and whether or not your pension liability is currently undervalued.

Under the Pension Plan adopted by Westinghouse effective as of January 1 of this year, pension benefits for service prior to the effective date of the plan are determined by average earnings during the ten-year period immediately prior to the effective date of the plan. The pension benefits for service after retirement are based on the actual earnings of the employee during his remaining period of service with the company. Under this plan, it is not as important to accurately forecast future earnings of employees, since pension benefits each year are determined by the employees' earnings in that year. On the other hand, it does make it necessary to maintain accurate and detailed records of the employee's earnings in each calendar year during his whole period of service with the company. These records are necessary to determine the amount of benefits that the employee is to receive upon retirement. This very greatly adds to the amount of records that must be maintained.

Since these records must be maintained for many, many years, we have considered it desirable to maintain the records of earnings in a centralized location rather than to keep the records locally at each pay roll point. To accomplish this, we have devised a simple procedure. The earnings on which the pensions are based are the employee's total gross earnings included in his pay. Since this is the same as the earnings shown on the employee's Withholding Tax Statement, we have each pay roll location prepare an extra copy of the W-2 form and forward it to our Headquarters pension record section. In this way, we are reasonably certain of securing an accurate record of the employee's earnings during the year.

We are also sure that we will receive the information for every employee for whom pension benefits are accruing. From the W-2 form a tabulating card is punched for each employee showing the employee's Social Security number and the earnings received during the year. This information punched in the tabulating card is recorded on the employee's

previous year's record by collating and gang-punching the earnings information into a tabulating card reproduced from the card used in the previous year. Once the earnings information is on the tabulating record card, we are in a position to mechanically obtain all of the information required for our actuarial evaluations. The actuary needs tabulations of our employees broken down into earnings groups for determining future Social Security benefits and by age, by sex, and by years of service. It would be practically impossible to secure this information for 100,000 employees by any means other than tabulating equipment.

Proper identification of employees is extremely important, particularly in a large company. Westinghouse has 1,376 employees by the name of "Smith" and 39 employees by the name of "John Smith." On our pension roll alone we have 33 employees named "Smith," of whom four are "John Smith." Names alone, therefore, are not satisfactory. Serial numbers have been used in various plants, but employees transfer from one plant to another. There is a point of identification that should never change and should never be duplicated. That is the employee's Social Security number. That number should remain permanently with the employee regardless of where he works and even though he changes his name.

Our practice is to use the employee's Social Security number on every pension form and on every record of an employee for pension purposes. In addition, the Social Security number must appear on the pay roll records for the employee and on his Withholding Tax Statement. We have found that by using the Social Security number as a direct and positive means of identification, we can materially simplify our record keeping. It has other advantages. In an organization with widespread pay roll locations, it is often necessary to telegraph earnings information for employees. We, of course, want to keep this information confidential, and not publicize an employee's earnings throughout the organization. We therefore follow the practice when requesting such information from a pay roll location of asking that the information be wired to us using the Social Security number only for identification, thus assuring secrecy.

Any of you who have had close association with the operation of a pension plan are familiar with some of the never-ending problems of correcting records. Older employees now reaching retirement age were employed many years ago before pension plans, before Social Security, and before it was as important to have accurate records of an employee's birth date and his period of service with the company. These employees, as they approach retirement age, are interested in correcting their birth and em-

ployment dates, particularly if it is to their advantage to do so. Often we find that our records are inadequate to either refute or substantiate an employee's claim. The records may show one fact, and the employee may claim another. It is not uncommon to find that the records are incorrect and that the employee's claim is justified.

Prior to the introduction of pension plans, it was not important that the records clearly state the reason why an employee left the company for a temporary period of time. They may indicate that 20 or 30 years ago the employee quit to accept employment elsewhere after having worked for the company for a period of ten years. The records may then show that he was re-employed six months or a year later. Normally our practice is not to give credit for service for pension purposes if an employee's service is broken by a voluntary separation lasting more than 30 days. However, service would not be broken if a leave of absence had been granted. According to the records, the employee would have lost credit for the ten years of service he rendered prior to his separation from the company. The employee now approaching retirement age may claim that he did not quit, but rather that he was given a leave of absence and that he should receive credit for the ten years of service he worked prior to the separation as shown on the record. If credit is given for these ten years of service, the employee may be entitled to $30 or $40 per month of additional pension, and the company's liability for the additional pension may be $5,000 to $6,000. Such a set of circumstances poses an interesting problem which must be decided.

Generally, if there is any evidence on the company's records to indicate that the employee was given a leave of absence, the problem will be decided in favor of the employee. If the records are clear that it was a definite resignation on the part of the employee, the additional credit for service is denied.

One of the amazing things in administering a pension plan is how often there is some definite information that can be located in the company's records that will either prove or disprove the employee's claim. This information may not necessarily be concrete evidence in written form. It may only be a hand-written notation on an employee's record card that would give some evidence that a leave of absence rather than a separation existed. Generally, leaves of absence are granted for a specific period of time determined in a number of months, such as six months or a year. If an employee left the company on the first of a month and returned to work exactly one year later, it would at least be an indication that a leave of absence had been granted. If this can be coupled with other evidence,

the doubt can be resolved in favor of the employee. Affidavits are commonly used to support an employee's claim for additional service. Generally affidavits are of little value because most people do not remember the details surrounding the service of another employee, particularly 20 or 30 years after it happened. We therefore make it a policy not to accept affidavits.

Birth dates are another thing which seem to have a habit of being in the process of continual change. One might expect this of women, but it also applies to the men. Employees hired at a young age are continually growing younger, and employees hired at an advanced age are continually growing older. Employees who are approaching retirement age in good physical condition and who would like to continue to work are apt to find that they are really not as old as the records show. Employees in poor health, anxious to retire, are apt to discover that they are really older than they thought they were.

At the time when many of our older employees were employed, records of age were not important, and if an employee felt that his chances of securing employment or a higher rate of pay would be better if his age on the records was different than his actual age, he did not hesitate to give the age that would do him the most good.

Anticipating that this condition might apply in a number of cases, in negotiating our new Pension Plan we included in it the following provision:

> Each employee who is or could become eligible for a pension under this Plan will be furnished by the Company, not later than June 1, 1951, a statement in duplicate indicating his birth date, continuous service and average monthly earnings used to determine pensions for continuous service prior to the effective date of this Plan. Each employee shall, not later than October 1, 1951, either return a copy of the Company statement indicating that the Company records are correct or file a claim on a copy of such statement for correction, indicating thereon the items of disagreement and submitting any evidence he may have to support his claim for additional continuous service, change in birth date or change in average earnings.

Under this provision of the Plan, all birth dates and employment dates should be corrected and our records finally established and determined as accurate, and will not be subject to further change. We are spending much time and effort to develop accurate records for use under the new Westinghouse Pension Plan. We believe that any company will find that careful establishment of pension plan records will be well worth the cost in eliminating future arguments with employees. From an actual dollars and cents standpoint, it is good business. The changes seldom work to the advantage of the company. If the records can be corrected and established

once and for all, and agreed to by the employees, there will be a definite savings to the company as compared to correcting the records 20 years from now when all of the facts are obscured by the passage of time.

The new Westinghouse Pension Plan is funded through trust agreements with two banks. Our company had two previous pension plans prior to the one made effective on January 1 of this year. One of those old plans was funded through a trust. The other was insured with an insurance company. Therefore, we have had experience with both methods of funding.

Our pension plan and our agreements with the unions were written so that we could either trustee or insure the new Plan as we saw fit. The decision to trustee our new Plan was made only after a very thorough investigation of the two funding methods. The investigation took several months of concentrated study, but even so, the final decision was not an easy one. There are good and sound arguments in favor of both methods of funding. Had there been a greater difference between the two methods, the decision would have been an easier one to make.

In the remaining time that I have, I cannot go into all of the details of the advantages and disadvantages of both types of funding, but I would like to touch on some of the more important points which we considered.

A large company that continues to operate a pension plan over a period of years cannot expect to obtain any material advantage from the mortality guarantee offered by an insurance company. An insurance company reserves the right to modify the rates charged for its annuities at the end of five years and from time to time thereafter. As long as the insurance company has the right to increase the price of the annuities, it will be in a position to recover any mortality losses that it may incur, provided the company continues to keep the plan in effect and annuities are being purchased. An insurance company generally operates its dividend formula on such a basis that the actual mortality experience of a larger company is reflected directly in the dividend. In other words, the final net cost of an insured plan will reflect the actual mortality among employees of the individual company involved. We therefore came to the conclusion that the net cost of our pension plan, regardless of the method of funding, could be reduced to a relatively simple formula. The long term net cost of the pension plan will be the actual dollars paid out in pension benefits less interest earned on the pension funds, plus the costs of administration, including trustees' fees or insurance company expenses.

As far as investment earnings are concerned, insurance companies show a rather remarkable history of consistent earnings at a somewhat

higher average rate than the industrial or utility bond yield. On the other hand, trust funds vary to a great extent depending on the investment policies followed by the trustees. The interest yield on trust funds is influenced by the limitation as to the type of investment that the trustees can make. Some trust funds are invested almost entirely in Government bonds, and, of course, the interest earned by such funds is low. Others have invested a percentage of the fund in common stocks, and generally these trust funds show somewhat higher interest earnings than the insurance companies have earned. There are a few outstanding trust funds that have secured phenomenal yields, but these are the exception. I believe that it can definitely be concluded that the interest yield on trust funds is in direct relationship to the amount of time and effort expended in handling the investments.

Even where a corporate trustee has the exclusive right to make the investments, company management must take a certain amount of interest in how the fund is being managed. After analyzing the investment record of a large number of trust funds and reviewing the investment record of several insurance companies, we came to the conclusion that a trust fund could be expected to equal or exceed the earnings of an insurance company, provided some equity securities were included in the portfolio, and provided sufficient time and effort were given to the investment of the trust fund.

The insured method of funding has the very definite advantage of relieving management of all responsibility for handling the investments of the pension fund. The insurance company assumes exclusive control over the funds, and management has no responsibility for the investments.

A trust fund offers greater flexibility than an insured plan. Investment policies may be changed from time to time. The company may transfer the trust funds from one trustee to another, or may even use the trust fund to purchase annuities from an insurance company. The newer insurance company contracts offer more flexibility than the older types of plans, and the latest contract that we reviewed contained a provision which would allow the company to withdraw the balance of the funds on deposit with the insurance company subject to a possible penalty.

The biggest difference between an insured plan and a trusteed plan is in the expenses charged. The insurance company can show a record of low expense charges, but it is faced with certain expenses that are not found in the trusteed pension plan. For example, there are sales and acquisition expenses, including commissions paid agents, that must be paid for by the insurance company from funds received from the pension plan. Of

course, a corporate trustee has certain expenses in security business that must be recaptured from the fees charged for the administration of the plan, but generally these costs are lower than the acquisition expenses of the insurance company. Premium tax is an expense that an insurance company must pay that is not chargeable against a trust. While it is relatively small as a percentage of money involved, it does amount to a sizeable number of dollars for a large pension plan.

Beginning with 1949, the insurance companies have been required to pay increased Federal income taxes. Prior to that time, their Federal income taxes were negligible in amount. While such Federal income taxes are still a relatively small percentage of the interest earnings on the pensions funds, they do add to the cost of operating an insured plan. At the present time, no Federal income taxes are payable on earnings of a pension trust fund.

An insurance company provides actuarial services as part of the administration of the pension plan. When the pension trust method of funding is followed, the corporation must hire a consulting actuary to make the actuarial evaluations. This, however, should not be a major item of expense.

After considering all these items, we came to the following conclusions.

1. The pension payments would certainly not be affected by the method of funding;
2. The expense of administering a trusteed pension plan is likely to be somewhat lower than the expense in connection with an insured plan;
3. If a good job of investing is done through a trust, the yield on the trust fund should be equal to or in excess of the interest earned by an insurance company.

With the investment return being the most important factor, time alone will tell whether or not our decision was right, and that our trust funds will be able to earn an investment return equal to or in excess of the investment returns of the insurance companies.

In conclusion, I would like to describe briefly the part that the Westinghouse Accounting Department played during the development and negotiation of the Westinghouse Pension Plan.

The responsibility for the development of the pension plan in its initial stages fell largely on our Accounting Department. It gathered all the necessary data for making the actuarial calculations and actually made most of the calculations of the cost of the proposed pension plan, using a consulting actuary as a check on its computations. When the pension plan

had been initially developed and the cost computed, the plan was received and studied by the management of our company. Many changes and modifications were made and details worked out, and almost every change required that the Accounting Department again re-figure the cost or determine the cost of alternate provisions to assist management in making final decisions. The plan was then presented to the union in actual negotiations, which started on May 21, 1950 and were concluded with the major union representing Westinghouse employees on October 1. At all of the bargaining sessions, when pensions were being discussed, the representative of the Accounting Department served on the negotiationg team and aided materially in the direct negotiation of the details of the pension plan.

The pension plan that was finally agreed to is far from a simple pension plan. It is complicated by the fact that the company has two pension plans that had to be considered in the benefit formula of the new plan. It is also complicated by the fact that we were determined to have one pension plan which would be applicable both hourly and salaried employees, which would cover employees in bargaining units as well as employees not represented by any union, and which would cover the sweeper as well as the President. While these things tended to complicate the pension plan, and tended to complicate the administration of that plan, we definitely believe that the Accounting Department was able to keep us out of many pitfalls and to aid in securing a plan that we will be able to administer satisfactorily and at a reasonable cost. Now that the pension plan is in active opertaion, it is largely the Accounting Department's responsibility to administer the plan.

CHAIRMAN BARSTON: We are fortunate in having for our next speaker an outstanding Professor of Accounting from the School of Business of the University of Chicago. Dr. Vatter is a native of Cincinnati. He has been a member of the faculty at Miami University at Oxford, Ohio, DePaul University of Chicago, and the Central YMCA College of Chicago.

He has had important experience as consultant to and in the employ of various industrial companies in Ohio, Indiana, and Illinois, and from 1942 to 1944 was Director of Finance, Metallurgical Laboratory of the Manhattan Project. In 1949 he was Consultant of the Bureau of Naval Personnel.

Dr. Vatter is a CPA of Ohio, holds a Bachelor of Science degree of Miami University, a Master's degree from the University of Chicago and a Doctor's degree which he received from the same university in 1946. The professional organizations to which Dr. Vatter belongs are CPA Society, American Accounting Association, Controllers Institute of America, and American Economic Association. His Greek letter associations are Delta Sigma Pi, Phi Beta Kappa, and Beta Gamma Sigma.

As a writer, Dr. Vatter has contributed to *American Economic Review*, *Journal of Business*, *Journal of Accountancy*, *Accounting Review*, and *The Con-*

troller. He has also published two books, "The Fund Theory of Accounting," and "Managerial Accounting."

I understand from Dr. Vatter that he is currently interested in a study entitled "Anticipating the Tax Effect in Business Decisions" which is a Research Study for Controllership Foundation, also the collection of teaching materials in the field of Controllership.

It is with great pleasure that I introduce Dr. Vatter who will speak on the topic "Managerial Accounting". Dr. Vatter.

MANAGERIAL ACCOUNTING

By WILLIAM J. VATTER
University of Chicago, Chicago, Illinois

This paper does not deal with any "new" kind of accounting; actually, managerial accounting is the oldest kind of accounting there is! Long before Paciolo reduced double-entry bookkeeping to textbook form, probably even before double-entry actually existed, there was need for accounting as we here use the term. The very earliest businessmen, operating primitive enterprises, had to reduce certain information to writing and record, if only to supplement observation and memory so that business affairs could be conducted with confidence and dispatch. The roots of accounting lie deep in the history of business, intertwined with the need for preserving data relevant to managerial decisions; the uses of accounting for management purposes began long before there were any financial reports of the type now considered to be the product of accounting operations. Accounting did not originate in the demands of investors, creditors, and government agencies, nor in the necessity for computing income, and presenting balance sheets; it began in the need on the part of managers for specific and definite information in order to make decisions and to carry on the operations of the firm.

I think that, as accountants, we underemphasize the management side of accounting, despite the fact that the first and the foremost function of accounting records and procedures is to facilitate management. This is understandable, of course. As we tend to specialize and professionalize accounting, we tend to think in terms of conventional standards, and general procedures. This has the effect of making accounting a field of activity that is independent of management. Accountants have developed, as it were, a highly technical and intricate line of products, each displayed and merchandised as a specialty; despite the obvious merit of these products, their real worth derives from the raw material of which they are made—the data upon which all the specialties of accounting depend—management information.

The very facts that the professional public accountant and the accountants employed by business enterprises use different titles, belong to different associations, read and contribute to different professional journals, and seem to be interested in different things, are evidence of the specializa-

tion to which I refer. The emphasis given in accounting literature to issues and problems of the public-information type (income taxes, S.E.C. regulations, the meaning and determination of "income" under fluctuating price-levels) is evidence that accountants tend to overlook the origins and the essentially managerial nature of their work. The way in which accounting is taught in the universities tends to follow more closely the specialized and technical features of accounting practice than it does the primary and underlying reason for the existence of accounting; usefulness for managerial purposes. This paper is a plea for the re-recognition of the managerial side of accounting; an exhortation against the over-specialization that has served to make accounting "independent" of management.

The viewpoints and techniques of the accountant are useful and desirable to management, as is evidenced by the large part of every company's accounting budget that is expended upon the collection of information and the performance of activities that have little direct relation to financial reporting as such. Further evidence of this is the growth and expansion of the controller concept in American business in the past two decades. What the accountant can contribute to management can be outlined here by examining the nature of the controllership notion.

I admit at the outset that controllership is not, and perhaps cannot be defined clearly. The Controllers Institute itself has not been able to do more than to outline in a general way the nature of the tasks that it believes may logically and effectively be delegated to controllers and their staffs. Every company has its own set of circumstances and conditions in which the controller must operate, and it is not likely that much agreement could be found among companies (or even among the members of this group) as to just what a controller and his staff are supposed to do. However, there are four angles in the concept of controllership that may serve to indicate something of what I mean by the managerial aspect of accounting.

To me there are attitudes, interests, and conceptions that underlie and determine the contribution which the controller can make to management. These are not functions or activities, but they are attributes of the men who perform those functions, and as such are elements of controllership. These four notions will be described in order.

The quantitative viewpoint. Accountants are useful in management because they typify the quantitative approach to the operations of business. This is an inherently logical, factual, and "objective" attitude, an emphasis upon measurements unimpaired by personalistic judgments or subjective interpretations. In this viewpoint, I think all accountants have a common

bond. Even when we disagree on specific angles of subject matter or procedure, we maintain an emphasis upon the logical and the quantitative side of business; we prefer measurements to opinion, and we would rather use numbers than words to describe a business event. Even when we do not agree as to the meaning of "objectivity" we still strive to be objective; we try to avoid intuitive judgments, and we tend to confine our reports to things that we are quite sure are "facts". This emphasis upon quantitative data—handled logically, with an honest attempt to be impersonally objective in reports and evaluations—is a primary characteristic of the accounting mind.

The "long-run" view. The second attribute of controllership may be described as an emphasis upon consequences of given events, this is a "long-run" view not in the sense of time, but in the sense that current activities build up ultimate effects. These ultimate effects are part and parcel of the current situation to the accountant, who strives to put together the consequences of an action with its occurrence. A business man who is not an accountant may, in the press of everyday decisions, find himself pushed into situations in which the immediate demands may to him overshadow the consequences of his decisions. The controller tends to keep management "on the beam" by calling attention to these consequences. Even though the cash account may presently show no such effect, fixed assets depreciate; inventories need some degree of protection and control in view of the risks embodied in them. Income taxes do not occur once a year; they are increased or decreased by the transactions that occur from day to day. Without indulging in crystal-gazing or guessing about the future, the accountant and the controller recognize and remind management of the consequences of daily activities through the emphasis upon the "long-run" or ultimate effects of current activities.

The public accountant and the controller share this attribute, as they share the quantitative emphasis. Even when they may argue as to how the consequential effects of transactions ought to be handled, and the degree to which the element of forecasting ought to be recognized, they both tend to preserve this "long-run" attitude. The desire to consider and provide for the effect of day-to-day events in terms of ultimate consequences is an extension of the quantitative emphasis; both the controller and the public accountant show this characteristic.

Policing of programs and policies. The third attribute of controllership is the conviction that accounting procedures are the means of following-up and checking upon the management decisions that have been made. This notion is not exactly foreign to the public accountant; I am

sure that the issuance of enterprise reports to stockholders and the public is an aspect of it. But the controller sees this in a more specific, intra-enterprise, and day-to-day fashion. The basic notion of internal control is that of integrating the activities of the firm with the paper work in which the controller has an interest. This is not merely a means to insure that all transactions are recorded, and that all property is accounted for; rather, it is aimed at reduction of errors, fraud, and waste. When he devises the system of paper work to accompany the regular operating activities the managerial accountant is concerned with preventing incompletely or incorrectly handled sales orders, reducing unnecessary expenditures of money or other resources, avoiding misdirected effort. He is concerned with efficiency in the use of resources quite as much as he is with the prevention of losses by casualty or by fraud. He attempts to "control" sales activities through procedures having to do with unfilled orders; he insists upon reviewing purchase orders and other documents that have little or nothing to do with current income statements or balance sheets. He is, above all, concerned with fixing responsibility for costs, so that they will show how the actions and decisions of various officials have affected the enterprise. In short, the notion of internal control is a means of policing the programs and policies of the management, so that the accounting reports will show how and to what extent the management programs have been carried out.

Accounting textbooks recognize this only in part, and the public accountant uses the system of internal control only in part; the ordinary conception of internal control as a means of reducing the degree of verification necessary in an audit, or the prevention of fraud, is a decidedly narrower view of internal control than is envisaged by the controllers' conception of the system—policing the programs and policies of the management, so that management may know to what extent its operations are proceeding as they were supposed to.

Internal control and system are of course only a part of the policing process referred to here. Budgets and budget comparisons are another way in which controllers help management to check up on its own operations. To report what actually did happen as against what was planned for is to provide management with a definite check upon its own effectiveness. One of the most valuable services controllers can perform for their managements is to help them put their plans into such form, and to match the actual performance against those plans on an independently impersonal physical or quantitative basis.

Interpretation of enterprise environment. The fourth aspect of the

managerial view of accounting is an application and extension of the quantitative emphasis, the "long-run" view, and the notion of systematic policing of management programs—to the full contest of environment. The managerial accountant attempts to relate the data collected and the procedures adopted to all the conditions and influences that are related to the accounting figures. Accounting information from this viewpoint derives much if not all of its real meaning from the context in which it is observed.

To express the degree to which managerial programs are being carried out, it is necessary to have not only a statement or a blueprint of those programs in the form of a budget, and a related tabulation of the actual results, but it is also necessary to interpret the differences thus observed in terms of changes in prices, shifts in method of operation, changes in the rate of activity, and other factors which may be responsible for the differences between budget and actual results. Costs are not mere data; they must be examined and related to the decisions or other uses to be made of them; costs do not all "rank abreast," but rather are relevant or irrelevant, as the questions to be answered are different. A shift in price-level must not obscure the changes in technical efficiency; past price levels must not confuse the issues of deciding upon future courses of action. All the changes in basic relationships or other factors in the environment of the firm must be analyzed so as to make them specifically separate. It is necessary to know where and how costs originate, how they ought to behave with respect to input, output, or other factors, and how they are affected by changes in the situation of the firm. It is therefore necessary to know not merely totals, but the different sub-classifications that may be useful for the various purposes that may have to be served. Revenue in an aggregate amount for a given period may be reported as a single figure for purposes of financial reporting; for managerial purposes, such a figure is probably of little use unless appropriate break-downs by territories, commodities, channels of distribution, terms of sale, or other bases, are available. This is because the issues and problems of sales management are related to the breakdowns of data, rather than to the aggregate amount.

In short, the managerial view of accounting includes an analytical, interpretive, and detailed expression of accounting information in terms of environmental situations, so that the results may be used for making decisions and effecting the control of management. Data accumulated by ordinary means may have to be adjusted, reclassified, or even "converted" into such forms as will enable management to see clearly not only what has been happening, but also the implications of the present and future courses of action.

These four attributes of managerial accounting may be seen at work in various ways. Perhaps it will make the position taken here a bit more clear if some illustrations are presented to show how the managerial viewpoint gains expression in practice.

One example is to be found in the notion of using *activities* as a basis for account classification, rather than descriptive or natural classifications. To help management control operations, it is not enough to keep accounts to show separately "cash" and "charge" sales, nor merely to classify advertising as "direct mail," "newspaper" or "magazine." Both the revenues and the costs must be related to the *activities* that are being performed. Sales arising from a given segment of the market must be matched with efforts being made in that area, as directed by some executive and as measured by certain costs arising from his decisions.

Costs cannot be controlled merely by tracing them descriptively—as materials, labor, or indirect costs related to batches or units or product. The only way costs can be controlled is by tracing them to activity-units—accounts representing operations over which some one executive has jurisdiction, in which certain activities are performed. Thus from the managerial viewpoint, costs are related to the activity unit first; costs are assigned to departments, divisions, sections, or areas *within* which the description of items as salaries, supplies, telephone, etc., have specific meaning. Thus, account classification should follow the organization chart, with descriptive titles used only within the organizational units; this is an unavoidable consequence of the managerial emphasis upon responsibility and control.

A second illustration arises from the fact that managerial accounting is "projective" rather than historical in emphasis. Unit costs to be used in determining price policy must be projected in terms of replacement costs—future costs if possible, but at least present costs—because the historical data are useful only to the extent that they serve as a basis for forecasting the future, when plans and policies are at stake. The emphasis upon budgets in managerial accounting is an example of the projective viewpoint. Here' the use of accounting data to project future operations is valuable not only in putting management's plans into dollar figures, but also to serve as a standard for interpreting the actual costs when they are measured. The budget cannot be simply historical if it is to be used to measure future performance. In this connection, one of the principal advantages of "standard" costs is the ease with which intelligently set standards may be converted into prospective costs, as changes in prices, efficiency factors, and other circumstances may occur.

Managerial accounting is "analectic," rather than summational in character. By this I mean that relevant data are selected from the records and files to fit the problem at hand. To illustrate: when the question is raised as to whether a certain part should be purchased in finished form rather than to continue making it in the firm's own plant, the only costs that are relevant to this issue are those that can be *saved* by not making that part. When the issue arises as to whether a by-product should be processed beyond the split-off point rather than sold without further processing, the only costs of consequence are those which *follow* the separation of the by-product; the costs of processing before split-off are of no consequence. The question of whether output should be expanded beyond present levels must be met with a tabulation of those costs which will increase with an expansion of output; costs that are not changed by an increased output are irrelevant to such a decision. Thus, the collections of cost data are partial rather than complete tabulations; the parts of cost that are included in a calculation must be selected with a view to meeting the problem that is being considered.

Separating costs into fixed, variable, seasonal, and other patterns and classifications is another aspect of managerial accounting. This kind of analysis is based on the fact that it is the *behavior* of cost elements—not their average or aggregate amount—that is important for managerial purposes. A knowledge of these patterns of variability is not only useful in selecting costs that are relevant for certain decisions, but it is the prime basis for the construction of flexible budgets, and for the interpretation and control of costs.

The notion of cost patterns goes beyond merely the idea of variations in the rate of output. For instance, there are ways of relating cost behavior to the "mix" variation in producing an extensive line of products; costs may be variable or fixed with regard to the length of a production run, the size of purchasing quantity in a purchase order, and in various other ways. And the conception of cost variability can be applied to more situations than merely those of the flexible budget.

For instance, if the attempt is made to relate the activities and data of a flexible budget or a break-even chart to the income figure as reported by conventional means, there are discrepancies between the income figure and the break-even chart which arise from the conventional practice of including fixed costs in inventories. To meet this situation, it is entirely possible to set up on income statement arranged to differentiate between fixed and variable costs. Fixed costs under such an arrangement would be treated as costs of the period in which they were incurred, excluded

from "manufacturing overhead" and inventories. This of course sets up an entirely different notion of income from that of conventional accounting, but this different notion of income is more clearly related to management methods than is the conventional type of calculation.

Promptness versus precision. There is still another characteristic of managerial accounting which distinguishes it from conventional financial reporting. This is the attention paid to the need for *prompt* reports, even though some precision is sacrificed for promptness. Decisions can be made (indeed, they nearly always are made) from data that are somewhat lacking in accuracy; but decisions ought never be made on the basis of data that are stale, out of date, or which do not reflect current conditions. The striving for precise allocations and mathematical exactness (characteristic of double entry bookkeeping and its consequences) are of some importance, of course; but precision and exactness are not so important as to delay essential information for managerial purposes. Partly from the standpoint of "practical" necessity, but more from the emphasis upon promptness, managerial accounting tends to sacrifice (whenever necessary) some degree of accuracy for the sake of prompt and current reports.

Managerial accounting is, in summary, an attitude or a position with respect to the functions and purposes of accounting. From the managerial viewpoint, accounting is more concerned with activities than it is with descriptive classifications; more projective than historical, it tends to emphasize problems and purposes more than procedures, it stresses relevant data instead of "accepted methods," and it aims at promptness even at the loss of some precision. This recognizes that the primary reason for the existence of accounting in any form is the use that management can make of it.

The managerial viewpoint has been decidedly underemphasized in accounting practice, in accounting literature, and in accounting instruction. To hold this view does not mean that financial reporting and the activities ordinarily considered to fall within the sphere of "accountants" is useless or of lesser consequence. What I mean to emphasize is that the overspecialization of "accountants" has tended to make members of the accounting profession forget the really basic task—providing data of the sort that will assist and implement the operations of management.

All this may be related directly to the teaching of accounting. Orthodox courses in elementary accounting (ordinarily followed by semi-professional "intermediate" and "advanced" courses) tend to stress financial reporting almost to the complete exclusion of managerial issues. These courses are commonly set up almost as if only the accountants were in-

terested in the results. Problems and issues presented are usually concerned only with making financial reports that conform to "accepted" professional standards. Only rarely (and then in a very narrow sense) are management needs considered important in the handling of data. Even cost accounting seems to be directed more toward the appropriateness of unit cost in the determination of income than it is with the problem of establishing control over, and making interpretations of cost data. The notions I have tried to present here as to the uses of accounting in management are but partially recognized even in those courses (reserved for advanced accounting students) entitled "systems," "budgets," and "standard costs."

This situation is especially unfortunate because the earlier courses in accounting are supposed to prepare students for careers in management and for "private" accounting. Most of what is really important about accounting these students never meet in their limited accounting work while they are in school. They must pick up the managerial side of accounting on the job, or on their own. If these students are asked to take some accounting as a part of their preparation, there is no real reason why they should not study accounting in terms of the way in which they will see it used and in the way in which they themselves will have to use it for management purposes.

Further, the over-specialization and over-emphasis upon financial reporting is not an effective way to arouse interest in and appreciation for the work of accountants. Students who do not intend to enter public accounting as a career are frequently bored with an intolerant of "pen and ink" bookkeeping, adjustments, work-sheets, and the form, arrangement, and technical content of balance sheets and income statements. Those things which make accounting useful to managers are the things which make accounting interesting and worth-while to students. Conventional curricula prevent the student from meeting these issues and avoid an understanding of the real reasons for accounting procedures, until he reaches the level of advance accounting specialization—which of course, he seldom does unless he is vocationally inclined towards public accounting.

At Chicago University we have tried to meet this situation by emphasizing the management viewpoint in very nearly the most elementary course—one that is required of all students. As it has developed, this course follows a fairly traditional elementary presentation, but we have limited the elementary material to one quarter (twelve weeks), and we are almost convinced that this preliminary work should be eliminated. This year we started ten students with no previous accounting along with

thirty who had preliminary work in the field. Despite the fact that these ten students were not unusually able or especially interested in accounting, they overcame their "deficiency" (the lack of an elementary course) without difficulty, and their performance in the comprehensive examinations was as good as is generally true of students who have had previous accounting work.

I should make clear, however, that we are a small school, and we are a graduate institution in that we do not offer a bachelor's degree. Half of our students are equivalent in age and experience to the typical "junior" —they come to us after two years of general or liberal education of collegiate grade. The other students hold bachelor's degrees from liberal arts, engineering, and other schools—only a few have four-year degrees in business. The fact that our school is somewhat different from the general school of business pattern may have something to do with our work and its results; we present accounting from the managerial viewpoint in a twelve-week course five hours a week. Our experience has convinced us that the managerial viewpoint can be taught, it can be taught without a great deal of previous accounting, and it can be used as an introduction to accounting without detriment to those who aim at the CPA examination and public accounting practice.

The content of this course may be briefly outlined, to give some idea of the methods and sequences of the ideas in it. As most recently presented, the course started from "scratch"; i.e., the students were assumed to have no previous acquaintance with accounting. (This was actually true of ten students, as mentioned previously.) The first two weeks were used to establish basic concepts: assets, equities, expense, revenue, and operating charges in manufacturing. The students' introduction to accounting, however, was through the cash basis of accounting, recording only cash receipts and disbursements. By means of this, the mechanics of double entry are established in their simplest terms, without a large amount of drill and practice-work. Periodic preparation of statements is easily and quickly understood, and the use of accounts to classify operating data is readily grasped. Accrual concepts are built onto the cash basis procedure by recognizing the effects of credit, and explaining the need for and the methods of amortization, the deferment and "expensing" of costs, and similar procedures with respect to revenue. Without drill on pen and ink bookkeeping, but with full attention to basic reasoning, the students gain an understanding of accounting concepts in a very short time.

The second two weeks is devoted to a study of budgeting. This serves to emphasize the projective side of accounting; the students quickly

recognize how figures can be made to express in definite terms the plans of management. In this, they also gain a further appreciation of the accounting concepts covered in the first two weeks. They learn that it is impossible to forecast receipts and disbursements except through the use of accrual notions. They discover that budget making is a process of decision, and they see uses for accounting figures in making those decisions; they see how past costs may serve as an index of future costs, and how past experience may be used to forecast revenues and financial needs. They learn that forecasting is an organizational responsibility, by making budgets for operating departments which are converted into procurement schedules for materials, personnel, and other services. What is most important, they gain an appreciation of the *need* for accounting to report on, and interpret deviations from the budget plan, by the use of regular recording procedures.

Three weeks are then devoted to a study of how an accounting system functions. The importance of systematic procedures in minimizing errors, fraud, and waste is made clear; the importance of documentary support for the recording of transactions becomes evident; and the need for close integration of paper work with actual operations (to provide useful information without needless complexity and red tape) is obvious. In this discussion, attention is given to the use of accounting machines (carbon paper, duplicating processes, and punched cards) rather than mere dependence upon journal and posting procedure. The reason for general ledger control accounts is much more effectively presented in terms of direct posting and direct filing procedures than they can be by any kind of columnar journal approach. The students learn what is involved in maintaining perpetual inventories, and how procedures serve to implement the control of cash receipts and disbursements. They discover what data must be handled in making up a payroll, and how the details may be preserved for reference and special uses. Most important of all, the students discover where the figures on a departmental report come from, how they are used in making budget comparisons, and what these figures mean to the department head.

The third phase of this course consists of three weeks devoted to cost analysis. Attention is given to conventional cost accounting procedures in terms of normal costs in which variable costs are segregated from fixed costs by separate indirect cost rates set up for departmental or other cost centers. However, emphasis is placed upon problems and cases which stress the relevance of cost data to management problems. Such issues as price policy (viewed from the cost side) under different circumstances, the selection of alternative methods of processing, the question of whether

to make or buy, and the use of unit costs to evaluate the advantage in new equipment, are contrasted with the conventional costing procedures used to determine income and establish inventory balances. The problems of management are contrasted with conventional methods of accounting, and the students learn that costs have meanings which shift as they are used in different situations.

Last, we spend two weeks on the subject of cost-standards. The students have already learned to relate recorded results with standards in their experience with budgetary control earlier in the course. Now, however, they are made to relate concepts of efficiency arising from "engineering" standards to money-costs. They are made to see the impact of price changes on the accounting figures, and the need for separating non-controllable price fluctuations from controllable elements of cost. They recognize the need for measuring efficiency variations and volume (capacity) variances, to be able to interpret cost absorptions as compared with cost incurrence. Above all, they see what the accountant is trying to do with standard costs, and how these efforts are related to managerial control.

This sounds like a very rapid-fire and heavy dose of high-powered accounting for a twelve week session. It probably is. The students, however, find it interesting and attractive because it is realistic, purposeful, and practical. Such a presentation as this tends to awaken a desire for and an appreciation of the work of accountants, thus paving the way for better cooperation between operating men and their controllers' departments. If the student understands what the accountant is trying to do, why he does it that way, and the use to which the accounting figures may be put, he cannot help but be interested in this kind of accounting, whether he is aiming at public accounting or whether he never actually takes another accounting course or never holds an accounting job. A real understanding of the managerial side of accounting is a definite help to the future CPA because he will be able not only to understand management more easily but because he will see his own position as an independent accountant more clearly and can build his professional notions on a sound groundwork of understanding of how accounting systems and procedures are designed and wherein his real contribution lies.

We think this approach to the study of accounting is productive, efficient, and stimulating both to the students and to their instructors. We are confident that we lose little and gain much by this approach to accounting. To stress the managerial view of accounting is to emphasize the reality underlying the accounting processes and procedures, and to rec-

ognize the important fact that accounting's prime function is to provide information which aids in the formulation of dependable judgments.

Perhaps it is not too far fetched to believe that what we have tried to do in the educational sphere is equally relevant in the entire professional field. A greater emphasis upon the managerial side of accounting, a greater willingness to help deal with the problems of management by the use of accounting procedures and methods, and more attention to the ways in which an accountant may serve and implement the managerial process may be a desirable aim for *all* accountants. Certainly, such an emphasis will do something toward dispelling the clouds of mystery from accountancy and will make it possible for accounting to serve better its real and primary function to be an aid to and a method of attaining more effective management.

SECOND SESSION

FRIDAY, MAY 18, 1951—1:00 P. M.
Junior Ballroom, Neil House

Presentation of Ohio Society of Certified Public Accountants award to highest CPA candidate in the fall 1950 examination

THIRD SESSION

FRIDAY, MAY 18, 1951—2:30 P. M.
Main Ballroom, Neil House

Introductory Remarks:

WILLIAM B. MCCLOSKY, *President, National Association of Cost Accountants; Controller, The Davison Chemical Corporation, Baltimore, Maryland.*

Address: "The Excess Profits Tax Act of 1950"

CARL L. BUMILLER, *Attorney-at-Law, The Union Central Life Insurance Company, Cincinnati*

Address: "Accountants Aid Marshall Plan and Vice Versa"

CLARK L. SIMPSON, *Deputy Controller, Economic Cooperation Administration, Washington, D. C.*

INTRODUCTORY REMARKS

CHAIRMAN MCCLOSKEY: I am delighted to have the privilege of welcoming you to this third session of the Thirteenth Annual Institute on Accounting.

We have had an excellent program through the first and second sessions today, and our program this afternoon should be equally interesting.

Our first speaker who will discuss the Excess Profits Tax Act of 1950, comes to us with a wealth of experience and background in federal taxation. He is attorney for The Union Central Life Insurance Company, Cincinnati, Ohio, where he specializes in tax matters relating to life insurance and estates, legal phases of bond investments, and mortgage loans on business and commercial properties. Earlier in his career he was tax attorney and accountant for the Kroger Company.

He is lecturer at the University of Cincinnati Evening College on Federal and State Taxation in the College of Business Administration in the Cost Accounting course. He has served as a special lecturer on federal taxation in the Law School of that University.

He has addressed numerous tax forums and institutes of bar associations throughout Ohio and meetings of the Controllers Institute at Cincinnati, Louisville, and elsewhere. He is the author of several articles on federal and state taxation and the Securities Act of 1933. He is a graduate of the College of Engineering and Commerce in the course of Business Administration and of the College of Law, University of Cincinnati, with the degrees of Commercial Engineer and L.L.B.

He is a member of several committees of the Tax Section of the American Bar Association; member of the Ohio State and Cincinnati Bar Associations; member of the National Tax Association; and Past President of the Cincinnati Chapter, National Association of Cost Accountants.

It is my pleasure to present to you Mr. Carl L. Bumiller who will speak on the subject "The Excess Profits Tax Act of 1950." Mr. Bumiller.

THE EXCESS PROFITS TAX ACT OF 1950

By CARL L. BUMILLER
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INTRODUCTION

The Revenue Act of 1950 as finally enacted, prepared the foundation for speedy imposition of the excess profits tax law despite the fact that it had been introduced originally as a "bill to reduce excise taxes." Section 701 of that Act directed that a bill for raising revenue by the levy of a corporate excess profits tax, with retroactive effect to October 1 or July 1, 1950, be introduced and reported as early as practicable after November 15, 1950.

In accordance with this explicit directive, the Excess Profits Tax Act of 1950 was considered and passed with unprecedented speed, on January 1, 1951, was transmitted by Congress to the President, and two days later became law. The tax was levied upon excess profits retroactively to July 1, 1950.

Like ancient Gaul of Caesar's time, the Excess Profits Tax Act of 1950 is divided into three parts. Part I contains the basic, substantive sections of the law. Part II establishes rules for calculation of the excess profits credit based on income, in connection with a designated list of tax-free exchanges in which one corporation has acquired all or some of the properties of another corporation. Part III prescribes appropriate rules for the calculation of invested capital in corporate liquidations, corporate reorganizations, and other exchanges.

Today, we shall not attempt to conquer all Gaul, however, but only Part I which contains the substantive sections of the law.

The underlying philosophy of Part I, according to the Finance Committee Report to the Senate, is to levy a tax upon increased profits presumed to be enjoyed as a consequence of the large increases in military expenditures following the outbreak of hostilities in Korea.

For this reason, primary emphasis has been placed upon an average earnings base for calculation of the excess profits credit. The Senate Finance Committee Report discloses that Congress deemed it desirable to select the years 1946 to 1949 as the base period because of the large number of new enterprises which had been launched during those years, and

because of the high level of earnings of many companies during that period. However, to avoid hardship to corporations which had poor earnings in base period years, the Act offers as an alternative, an invested capital credit.

Where the average earnings method was to be used, Congress felt that the full allowance of earnings for the years 1946 to 1949 without adjustment, would over-state the general earning ability of most corporations. Accordingly, Congress debased average earnings for this period by 15 per cent, and allowed only 85 per cent as a credit.

No doubt Congress was influenced on the one hand by the necessity of obtaining increased revenues, and on the other hand by testimony before the House Ways and Means Committee that the tax rate should be kept low to avoid inefficiencies in the business economy.

Whether the reasoning of Congress was sound in disallowing 15 per cent of average earnings as part of the credit is open to debate. That an excess profits tax law should siphon off increased profits arising out of the Korean hostilities and war spending is acceptable, but that it should seek to re-capture a portion of peace-time earnings by means of this reduction in the credit, is highly questionable. In this connection it may be recalled that the World War II credit was 95 per cent of average base period net income.

Exempt and Specially Treated Corporation

In General. In theory, it may be desirable to treat all classes of corporations alike under an excess profit tax law, but in practice Congress has found it necessary to exempt certain types of corporations. Among these are charitable and other corporations which are exempt from income taxation under Section 101 of the Internal Revenue Code, and includes those which are taxable on unrelated business income under Supplement U, a new provision first appearing in the Revenue Act of 1950.

Other exempt corporations are domestic and foreign personal holding companies, regulated investment companies, foreign corporations which are not engaged in trade or business in the United States, and active domestic corporations which derive their gross incomes primarily from sources outside the United States. A corporation subject to Title IV of the Civil Aeronautics Act of 1938 may exclude compensation received from the United States for the transportation of mail by aircraft, and if after having done so, its adjusted profits net income is zero or less, it is exempt from tax.

Finally, incomes of domestic corporations from mining any one of a long list of strategic minerals, and incomes from the excess output of mines, natural gas properties, and timber blocks are exempt.

Personal Service Corporations (Section 449.) A "personal service corporation" is one whose income is derived primarily from the personal activities of principal shareholders who are actively and regularly engaged in the business of the corporation. A personal service corporation may elect to be exempt, as under the World War II law, but all of the shareholders must include in their individual income tax returns the undistributed income of the corporation after deduction of its federal income tax accrual (Supplement S, Internal Revenue Code.)

Regulated Public Utilities. As a result of extensive hearings before the House Ways and Means Committee which disclosed inherent limitations in profits of regulated public utility companies, Congress adopted a unique method for calculation of their excess profits credits.

Congress created and defined a regulated public utility as one which receives 80 per cent or more of its operating income from such public services as the furnishing of electric energy, gas, water, sewage disposal, rail, air, water, motor and suburban transportation, pipe line, and telephone and telegraph service. For this class of corporation, the credit for normal earnings, in the alternative, may be arrived at by first subtracting total liabilities from total assets as of the beginning of the year to arrive at invested capital.

Those public utilities which are required to maintain prescribed systems of accounts calculate adjusted invested capital directly by combining average common and preferred stock accounts, borrowed capital, and capital and earned surplus.

In contrast to other corporations, regulated public utilities take into capital 100 per cent of borrowed capital rather than 75 per cent, and of course reinstate 100 per cent of the interest charge on borrowings. The average increase in equity and borrowed capital during the current year is added in, or the average decrease from the year is deducted.

Exempt earnings of regulated utilities are determined by multiplying the resulting capital, including equity and borrowed capital and accumulated earnings, by the statutory rate of return for the particular class of regulated utility. For most classes, the statutory rate is 6 per cent; for telephone or telegraph companies and common air carriers, however, the rate is 7 per cent. The utilities also found the Ways and Means Committee sympathetic to recognition of federal income tax accruals as operating expenses by permitting the current accrual to be added to the percentage rate of return on capital.

Rates and Minimum Credit

General Approach. The World War II excess profits tax law adopted the "two basket" approach under which normal profits were placed in one basket, subject only to the normal and surtax rates, while excess profits were placed in a second basket subject only to the excess profits tax rate.

In contrast, the Excess Profits Tax Act of 1950 adopts a "one basket" approach. The entire taxable net income first is taxable at the corporate normal and surtax rates, next the applicable credit for normal earnings is substracted from this net income after adjustments for excess profits tax purposes are made and the remaining amount term "the adjusted excess profits net income," is taxed at the excess profits tax rate.

In the World War II act, the excess profits tax rate was 95 per cent of adjusted excess profits net income less a credit of 10 per cent, resulting in an effective tax rate of 85½ per cent. On a comparative basis, the current excess profits tax rate may be calculated at 77 per cent by adding together the normal tax rate of 25 per cent, the surtax rate of 22 per cent, and the excess profits tax rate of 30 per cent. In addition, the combined regular and excess profits taxes may not exceed a limiting rate of 62 per cent of excess profits net income.

Either method of tax computation results in substantially the same tax burden, but the "one basket" approach has the advantage of permitting seperate calculation of the regular corporation taxes and the excess profits tax and better coordination of collection and assessment procedures.

The $25,000 Minimum Credit. A minimum credit of $25,000 is accorded to any corporation whose excess profits credit is less than that amount. The purpose of the minimum credit is to relieve small corporations from tax, and in this respect is an improvement over the World War II statute which granted a specific exemption of $10,000 to all corporations regardless of the amount of their regular credit.

The unused portion of the excess profits credit may be carried back one year in reduction of the excess profits tax for that year, and to the extent that the credit is not consumed in that year, it may be carried forward to five succeeding excess profits tax years. The unused excess profits credit carry-back or carry-over is added to and increases the regular credit for the current year. No unused portion of the minimum credit of $25,000 where it is applicable may be carried to other years.

Adjustments to Base Period and Current Year Incomes

The statute requires adjustments to normal tax net income of the current taxable year, whether the invested capital or average earnings

method is used, in order to eliminate unusual and non-recurring items. It also requires a similar set of adjustments to incomes in base period years if a corporation has an eye to possible adoption of the average earnings method for determining its excess profits credit.

Reinstatement of Unusual Deductions. One of the most important adjustments, and one which many corporations no doubt will be able to make in one form or another, permits a corporation selecting the average earnings method to reinstate unusual deductions taken in base period years.

Internal Revenue Code §433(b)(9) creates three specific classes of deductions which relate to (1) adverse judgments, decrees, claims and awards; (2) intangible drilling and development costs of oil and gas wells and mines; and (3) casualty losses, and those arising from demoltion and abandonment of property.

The Regulations at §40.433(b)-3(d)(1), provide that deductions which do not fall within any of these three classes may be grouped by a corporation in such other classes as are reasonable in its type of business, and are applicable to its business and accounting practices. World War II experience disclosed, under a similar provision, that many corporations had abnormal deductions which they could reinstate.

Observe these four limitations: (1) only the amount in excess of 115 per cent of the average amount of deductions in that class for the four previous years may be reinstated; (2) no amount may be disallowed unless it exceeds 5 per cent of the average excess profits net incomes for the taxable years in the base period; (3) the amount to be disallowed in any base period year is limited to the amount by which the deductions of the particular class exceed the deductions of that class in the current excess profits taxable year; and (4) no deductions of any class may be reinstated if they are a result of a change in the manner of operation, size or condition of the taxpayer's business, or are a cause or a result of an increase in gross income or a decrease in deductions of a substantial nature.

Abnormalities in Current Income. A companion adjustment to that for unusual deductions in the base period is one for abnormalities in income in the current excess profits taxable year. (Section 456.) The statute lists four separate classes of abnormal income which are similar to but more restrictive than those in Section 721 of World War II. These are: (1) income arising from favorable claims, awards, judgments, or decrees; (2) income from exploration, discovery, or prospecting extending over more than one year; (3) income from the sales of patents, formulas, or processes developed over a period of more than one year (but not income from sales of patented articles. Compare Section 721); and (4) income included in

the taxable year rather than in another by reason of a change in method of accounting.

The Regulations at §40.456-2(b) state that other income may be grouped in other classes similar to those specified in the statute, as are reasonable in the business, and appropriate in the light of the experience and accounting practices of the corporation. Only the amount of abnormal income in excess of 115 per cent of the average of the previous four years is subject to adjustment, and then only if it is attributable to previous or future taxable years. The amount so attributable must be allocated to those years and the tax for those years adjusted accordingly. However, any income attributable to base period years does not increase the average earnings credit.

Capitalization of Advertising Expenditures. One relief computation which at first blush seems to hold forth great promise, but during the last war at least, was not actually availed of to any great degree, is the disallowance of advertising expenditures. If the taxpayer makes timely election (within six months after the due date for its first excess profits tax return) expenditures for advertising or the promotion of good will, made in base period and subsequent taxable years, may be regarded as capital expenditures. The election once made must be adhered to for all future years, but does not affect years prior to the base period.

The Regulations at §40.451-2 state that an expenditure for advertising or the promotion of good will may be considered a capital investment if upon consideration of all the facts and circumstances, it may be regarded as increasing the earning capacity of a corporation over a substantial period subsequent to the year in which the expenditure is made. In addition, all advertisements to promote a business, or a new territory, new products, or a brand or trade name, and all others to the extent that they exceed the average for the preceding four years, may be capitalized. An expenditure once capitalized remains a permtnent asset for the business and no deduction for depreciation may be taken in future years.

If the election to capitalize is made, a corporation is considered to have taken an inconsistent position under Section 452 insofar as base period treatment is concerned, and will be required to recompute its income taxes for those years, together with 6 per cent interest. For this reason, and the binding nature of the election in future years, corporations have been wary, and rightly so, of exercising this seemingly attractive election.

Capital Gains and Losses. The last word on capital gains and losses as the excess profits tax bill came out of conference, is that net capital gains are to be eliminated from both current income and base year income. Of course, net capital losses are not deductible by a corporation in calculating

its income tax. However, the treatment of ordinary gains and losses under Section 117(j) of the Internal Revenue Code is to be reversed in base period years but not in the current taxable year. It was agreed, however, by the Conference Committee that the matter of Section 117(j) losses should receive further study.

Installment Basis; Long-Term Contract; and Others. There are several other adjustments, the most important of which I shall mention. For excess profits tax purposes only, a corporation using the installment basis of accounting may elect to change to the accrual basis, and one with income from long-term contracts may shift to the percentage-of-completion method. Other adjustments entirely eliminate all dividend income from both base period incomes and the current return, and eliminate repayment of processing taxes to vendees and income and deductions arising at the time of the retirement of bonds of a corporation.

As borrowed capital is a factor under both the average earnings and the invested capital methods, current income is adjusted upward for interest charges. For the purposes of the invested capital method, this is 75 per cent of annual interest, and under the earnings credit, it is 75 per cent of interest on increases in borrowed capital subsequent to the base period.

One other adjustment to income which should be mentioned is the retention of the right to carry a net operating loss back one year and forward five years. However, a net operating loss carry-back or carry-over is eliminated in computing excess profits net incomes of the base period years, in determination of the average earnings credit.

Excess Profits Credit Based on Income

General Average. A corporation is now ready for the job of selecting the most advantageous excess profits credit. Let us consider first the factors underlying the selection of one of the average earnings methods, which, it is anticipated, at least a majority of corporations will adopt.

As in the World War II law, the Excess Profit Tax Act of 1950 proffers a general average method and a growth formula. Under the general average method, the poorest year of the four years 1946 to 1949, is eliminated, after first increasing deficit years to zero. The three highest years then are totaled and averaged to obtain the average base period net income.

Growth Formulas. A corporation next should make computations under the several formulas included in the "growth" method, to determine if it meets the statutory tests for corporate growth. If it does, a corporation

may take advantage of one of the growth formulas and use it instead of the general average method if it proves more advantageous.

One of the tests for growth, which I shall call the "increasing size" test, centers in part around the size of the corporation, and in part around the amount of its total pay roll or total gross receipts. If total assets as of the beginning of its base period, including all assets of includible corporations with which it may file a consolidated return, do not exceed $20,000,000, the corporation meets the basic requirement. In addition, if either its own pay rolls, excluding those of includible corporations, for the last half of its base period have increased 30 per cent or more pay rolls for the first half, or gross receipts for the last half have increased 50 per cent or more over those for the first half, the corporation fulfills the "increasing size" test.

An alternative test to the first one, which I shall refer to as the "net sales and new products" test, centers around net sales for the period beginning January 1, 1950 and ending June 30, 1950. Net sales for this purpose are exclusive of discounts, returns, and allowances. If the net sales for this period, when multiplied by two, equal at least 150 per cent of average net sales for the years 1946 and 1947, and if 40 per cent or more of net sales for the full year 1950 are attributable to a product or class of products of a kind not generally available to the public before January 1, 1946, and if net sales of the new product for 1946 are 5 per cent or less of net sales for 1949, the alternative second test is met. This test clearly has been tailor-made to fit the television industry and by its very terms, few companies will be able to qualify under it.

It will be recalled that the old growth formula measured corporate growth by increases in income alone, and not by changes in pay roll, size, gross receipts, or net sales. Corporations were permitted to add to the average income of the last half of the base period, 50 per cent of the increase in the average income from the first to the second half. This was subject, however, to the limitation that the alternative credit based on growth could not exceed the income of the highest year in the base period.

As the Joint Committee on Internal Rvenue Taxation explains in its summary of the new growth formulas, application of the old formula to the new base years would have resulted in the widespread use of income of the profitable year 1948 as the sole basis for determination of average base period net income. Accordingly, three new formulas have been incorporated into the law which offer no opportunity to use 1948 as the sole basis for calculating the average earnings credit, but do offer several combinations of years from which the corporation may select the most advantageous.

These formulas give a corporation the alternative of: (1) using its excess profits net incomes for the last 24 months of the base period and dividing by two; (2) using the excess profits net incomes of the last 12 months of the base period; or (3) combining the excess profits net incomes of each of the 12 months beginning July 1, 1949 and ending June 30, 1950 after weighting the excess profits net incomes for the months in 1950 less favorably.

A corporation which meets the net sales and new products test, say one in the television industry, has a choice of a fourth formula which is a variation of the third one. If its excess profits net income for 1949 was very poor, that is, was 25 per cent or less of its excess profits net income for 1948, it may substitute July 1, 1948 to December 31, 1948 for the corresponding six months of 1949, and then add six weighted months of 1950.

These formulas give fairly ample recognition to corporate growth, *provided*, of course, that a corporation is able to qualify initially as a growth company. Perhaps a substantial number of companies will be able to adduce the required increases in pay roll or gross receipts to qualify for at least one of the first three optional methods in which the new products requirement is not a factor.

Additions to Capital in the Base Period. It was generally conceded by Treasury representatives and by the members of the House Ways and Means Committee alike, that under the average earnings method, greater recognition should be given to changes in capital. This was a most important concession in principle from that of World War II which permitted no allowances for any increases in capital during the base period, whether in the form of equity capital, borrowed capital, or retained earnings. However, changes in formal equity capital, but not in borrowed capital or retained earnings in years after the base period, were accounted for by an 8 per cent return on capital additions and a 6 per cent rate against reductions.

Under the 1950 law, growth companies do not receive any credit for base period additions to capital. However, all companies which use the general average method are permitted a tax-free return of 12 per cent on base period capital additions, but are not penalized for base period capital rductions.

For a calendar year corporation, the increase is 100 per cent of the increase in 1949 plus 50 per cent of the increase in 1948. Borrowed capital, as under the invested capital method which I shall explain shortly, is weighted at 75 per cent of the actual amount. Investments of capital in

1946 and 1947 are excluded, as the Ways and Means Committee was of the opinion that they are reflected adequately in base period earnings.

Increases in equity capital include not only increases in formal capitalization but also increases in surplus arising through the retention of earnings in the business. The increases are measured by a new device called the "asset" method about which I shall have more to say later. Under this method, liabilities are deducted from assets, and comparisons then are made between net asset figures at the beginning and end of the years 1948 and 1949 rspectively.

Certain adjustments are required to be made to the net asset figures before computation of increases in capital. One of these is the disallowance of a portion of borrowed capital, namely, the capitalized value of the actual interest charge on borrowed capital, capitalized at 12 per cent. The effect of this adjustment is to eliminate the amount of borrowed capital represented by the 12 per cent statutory rate applicable to invested capital generally. Another adjustment relates to the disallowance of 75 per cent of loans to members of a controlled group of corporations, and a third is an adjustment for changes in inadmissible assets.

Increases and Decreases in Capital After the Base Period. Congress has given still further stimulus to the general average and growth methods by granting credit for increases in capital in excess profits taxable years following base period years, but on the other hand, requires a compensating reduction in the earnings credit by 12 per cent of any decreases in capital.

The increase or decrease in equity capital, including variations in accumulated earnings, initially is determined from the end of the base period up to the beginning of the current taxable year under the asset method. To this is added the average daily amount of money and property paid in during the current taxable year in stock or as paid-in surplus or as a contribution to capital, or from this is deducted the average daily distributions during the year in excess of current earnings and profits.

The increase or decrease in borrowed capital as the case may be, is calculated up to the beginning of the current taxable year, and then on a daily basis through the current year. Only 75 per cent of borrowed capital is taken into account, consistent with its treatment under the invested capital method.

The usual adjustments for inadmissible assets and increases in loans to members of a controlled group are made, and the net capital addition or the net capital reduction then is extended at 12 per cent. This return on increased capital is added to the average earnings credit, or the percentage of

reduction is subtracted from the average earnings credit, to yield the final excess profits credit based on income.

Excess Profits Credit Based on Invested Capital

The Asset and Historical Approaches. According to the Ways and Means Committee, the House bill scrapped the venerable historical approach to the calculation of invested capital because a corporation can more easily determine its present capital from the cost or other basis of its assets, than it can by reconstructing the amounts originally paid in for stock. A special advantage of the asset approach, according to the Committee, is that the income tax basis for gain which this approach adopted is already being used by corporations in depreciation calculations.

The Senate, however, was of the opinion that if any corporation could improve its credit by use of the seasoned historical approach, it should be permitted to do so. The House receded in favor of the Senate amendment. Thus we have in the law two approaches to invested capital, the asset approach and the historical approach.

The asset approach, as its name implies, would determine equity capital at the beginning of the taxable year by subtracting total liabilities on that date from total assets. For this purpose, assets to be taken into account are cash and other property held by the taxpayer in good faith for the purposes of the business. Total liabilities include all liabilities of the corporation which are absolute and not contingent. The Regulations state that ordinarily the starting point for the determination of equity capital is the balance sheet of the corporation. (Regulations at §40.437-5.)

If a corporation wishes to use the historical method, it must make an election to that effect on its return, and an election once made is irrevocable for that year. As between the asset method and any of the average earnings methods, no election is required as Section 434(a) of the Act provides that the excess profits credit shall be determined under the one or the other, whichever results in the lesser tax. Thus, if the average earnings method had been adopted, but audit of the return disclosed errors in computation of tax or interpretation of law which result in the asset method being more advantageous, that method will be substituted on the return. The Regulations and the instructions to the excess profits tax schedule provide that in this situation, that is where the average earnings method has been chosen, a corporation may elect the historical method on its return in the event that it subsequently should become significant.

Under the historical method, invested capital is built up from original and subsequent contributions to capital, that is, money and property paid

in for stock or as paid-in surplus or as a contribution to capital, including accumulated earnings and profits up to the beginning of the taxable year. Certain technical adjustments must be made, such as those for a deficit of a transferer corporation, those relating to intercorporate liquidations, and those between stated capital and earnings and profits arising out of taxable stock dividends.

Under both the asset approach and the historical method, 75 per cent of borrowed capital is included in invested capital. Borrowed capital is defined as capital evidenced by a bond, note, bill of exchange, debenture, certificate of indebtedness, mortgage, deed of trust, bank loan agreement, or conditional sale contract. The excess profits tax schedule to the return requires an adjustment to current year income for interest on borrowed capital, under both the average earnings method and the invested capital method. For purposes of the invested capital method, 75 per cent of the interest deduction on borrowed capital is eliminated, and under the earnings credit, 75 per cent of the interest on the increase only in borrowed capital in years subsequent to the base period, is reinstated.

Another new approach, called the "recent loss adjustment" has been incorporated into the asset approach itself. Under this, recent net losses of a corporation may be restored to surplus for an increase in invested capital. The "recent loss period" means either the base period 1946 to 1949 or the ten year period beginning January 1, 1940 and ending December 31, 1949, whichever results in a greater restoration of recent losses. The amount of the adjustment is the excess of all of the net operating losses in the most advantageous recent loss period over the aggregate of the net income in the same period. A corporation is not permitted to reach back prior to January 1, 1940 in the restoration of net losses to surplus.

Under the historical method of calculating invested capital, a deficit in surplus does not reduce invested capital. In this respect, the historical method is more advantageous to a corporation which has a net deficit over its entire life span. On the other hand, the asset method is more advantageous if there were operating losses in recent years only.

In a very limited area, a corporation which is adopting the average earnings method or the historical invested capital method has the benefit of an adjustment which is similar to the recent loss adjustment under the asset approach. This permits such a corporation to carry forward to the years 1950 and 1951, any operating losses incurred by it during its base period, but which had not been utilized against the profits of other years because of the former limitations on carryovers to two years back and two years forward. Some corporations may find it advantageous to elect the historical

invested capital method or the average earnings method for 1950 and 1951 in order to utilize an unused base period operating loss, and then possibly switch to the asset approach in subsequent years. [Section 433(a)(1)(J)].

On one hand, the historical approach stresses original and subsequent paid-in and accumulated capital. Old skeletons, for example, good will, which had disappeared from the balance sheet without an accompanying income tax deduction may be revitalized in order to increase the invested capital credit.

On the other hand, the asset approach emphasized the net asset figure. There is some question under this method whether good will, once written off, may be reinstated as an asset.

With respect to expenditures for tangible assets, the answer may not be difficult, for example, those made by a tenant for leasehold improvements prior to occupancy. Suppose that the expenditures are written off immediately by the lessee, but for federal income tax purposes are depreciable on an annual basis. There should be no question that the undepreciated tax basis of the leasehold improvement account is includible in total assets.

The Senate Finance Committee stated in its report accompanying the Senate bill, that in general the principal difference between the asset method and the historical method is in the recent loss adjustment under the asset method. Although this would seem to imply that the answer on the good will question is the same under either method, it is probable that the committee statement was one of broad application only. In any event, under the asset approach, it is recommended that good will or other assets which have been written off, and the surplus account reduced other than by an accompanying permissible income tax deduction, be restored to assets and surplus respectively.

Changes in Capital During the Taxable Year. Under both the asset method and the historical approach, increases or decreases. Dividend distributions out of current year earnings reduce capital as of January 1 of the succeeding year. However, to the extent that dividend payments are in excess of earnings and profits of the current year, they reduce invested capital from the data payable. [Regulations, Sections 40.441-1(d).] A special provision, similar to that in the World War II law, provides that dividends paid within the first 60 days of the taxable year are considered to have been paid on the preceding December 31, irrespective of the amount of the dividend declaration. This treatment applies in general to all computations under the average earnings and invested capital methods.

Operating profits or losses are not reflected in invested capital until the

following January 1 for a calendar year corporation, under either approach to invested capital.

Rates of Return. The permitted rates of return on invested capital are more liberal than those under the World War II law. The comparisons are as follows:

Bracket of Invested Capital	*Rates* *World War II*	*1950 law*
First ..... $ 5,000,000	8%	12%
Next ..... $ 5,000,000	6%	10%
Over $10,000,000	5%	8%

The credit finally determined is reduced by the proportion of inadmissible assets to the total of all assets. "Inadmissibles" are those assets the income from which is fully or partially exempt from tax, and include shares of stock and partially or fully exempt federal or state obligations. The Regulations state that treasury stock is an inadmissible asset [Regulations §40.440-1(b).]

Another device, called the "new capital credit", which is a part of the asset approach, insures that new capital, whether in the form of equity capital, borrowed capital, or accumulated earnings, arising after the beginning of the first excess profits year, will be taken into invested capital at the 12 per cent bracket. Otherwise, new capital introduced into corporations in the $5,000,000 and over invested capital brackets will carry a 10 per cent or 8 per cent return only. New capital arising as a result of enumerated inter-corporate transactions is excluded from the new capital credit device. Likewise, new capital of a corporation which uses the historical approach is accounted for at the bracketed rates of return for the corporation, that is at 12, 10, or 8 per cents.

The 1950 excess profits tax law furnishes no special incentive comparable to that of World War II, for inclusion of additions to paid-in capital or paid-in surplus at 125 per cent.

Relief Provisions

In General. The 81st Congress was keenly aware of the need for special relief provisions in the new legislation, but was unwilling to legislate them in the indefinite pattern of Section 722 of World War II. The inconsequential amount of relief granted on the 54,500 or more applications for excess profits tax relief primarily because of the inadequate standards of relief set up in that section, have led Congress to seek more objective standards.

Congress has attempted to do this by prescribing rigid standards of

relief for specific sets of circumstances. If a corporation measures up to these, it then may construct an average base period net income under an accompanying ironclad statutory formula. If it does not, it may still use one of the regular methods of determining the excess profits credit.

These relief provisions benefit the following classes of corporations: (a) new corporations, that is, those which commenced business after the first day of their respective base periods; (b) corporations which commenced business prior to the base period, and whose normal production or output has been interrupted or whose businesses have been depressed; (c) corporations which commenced business before the base period, and which have undergone substantial changes in products or services during the latter part of the base period; (d) those which began on or before the first day of the base period, and which have enjoyed a substantial increase in capacity for production or operation; (e) depressed industry subgroups proclaimed by the Secretary of the Treasury.

If a corporation is entitled to relief under one of these provisions, application may be filed with the return for the taxable year in question, within the period of time prescribed by Section 322 for filing a claim for refund, or in some cases after the period for filing a claim for refund has expired, to offset the assessment of a deficiency.

Retes of Return. The technique entitling a corporation to relief in each situation, embodies the use of a rate of return for the industry classification of the corporation. The industry classifications for this purpose are those which are defined in accordance with the specifications shown in the Standard Industrial Classification Manual, prepared by the Division of Statistical Standards, Bureau of the Budget. A corporation is a member of an industry classification if more than 50 per cent of its gross receipts as defined in Section 435(e)(5) for the taxable years beginning with or within its base period is attributable to such industry classification.

To determine the rates of return, the Secretary of the Treasury first is required to aggregate the net incomes for each industry classification without regard to net operating loss deductions and after adding back interest deductions, as shown on income tax returns filed by corporations in each industry classification. He then is required to divide these aggregate incomes by the aggregate total assets of all the corporations to obtain the rate of return. He must proclaim yearly rates of returns for each of the four years 1946 through 1949, and also aggregate the results of the four years in this period for the determination of base period rates of return. Rates of return for the eleven year period 1938 through 1948 for use by

corporations in depressed industry subgroups, also are to be determined by the Secretary.

All determinations by the Secretary of the Treasury of income, aggregate interest, and net operating loss deductions, are to be made on the basis of returns regularly used by the Treasury Department in compiling published statistics from income tax returns, and effect also is to be given to renegotiation of contracts in accordance with published renegotiation statistics compiled for the various industry classifications.

The Act provides for the determination of tentative rates of return by the Secretary not later than March 1, 1951, and pursuant to this requirement, he has published tentative rates of return for the some 65 industry classifications. These are to be used until final rates can be determined and proclaimed.

In certain circumstances it is proper to use the yearly rate of return. For example, in the special relief provision for interruption of output or operation, or temporary economic depression unusual in the case of the taxpayer in only several base period years. In most circumstances, however, the base period rate of return is used, while for a depressed industry subgroup, the adjusted rate of return for the years 1938 to 1948 is correct.

Generally, the prescribed rate of return is applied to the total assets of the corporation other than inadmissible assets and loans to members of a controlled group of corporations, and without reduction for liabilities. In other words, the appropriate rate is applied to the total asset figure and not to net assets. However, as in the construction of the rates by the Secretary of the Treasury, all interest deductions were added back, the law requires that in the use of the rates, reduction be made for interest expense in arriving at a reconstructed return on gross investment. It should be noted that this reduction is for all interest, not merely that on borrowed capital. [Regulations, §40,422-3(d)(5).] Finally, the resulting constructed average base period net income is reduced by 15 per cent as in the average earnings method.

As the base period rate of return is applied to total assets without reduction by the amount of liabilities, *bona fide* increases in borrowed capital or other liabilities and obligations may be used to finance the receipt of income exempt from the excess profits tax. Although there are inadvertent gaps in the statute itself, the Regulations make it clear that "total assets" in these relief provisions are those which are held by a corporation in good faith for the purposes of the business.

Generally, additions to and reductions in capital after base period years

are treated in the same way as under the general average method of determining the excess profits credit. However, except for the relief provision for interruption to output or temporary depression in the first two years of the base period, none of them give credit for additions to capital in the base period. The reason for this is that, in general, the total asset figure to which the industry rate of return is applied already reflects changes taking place in capital during the base period.

In order to receive the benefit of any of these relief provisions except that relating to new corporations, a corporation must have commenced business on or before the first day of its base period. The growth method also, which I have discussed, is available only to a corporation which has commenced business on or before that date. When a corporation "commenced business," therefore, is of prime importance.

The Regulations, §40.445-1(a)(2), state that the words "commenced business" do not have the same meaning as "in existence." Ordinarily, a corporation commences business when it starts the business operations for which it was organized, whereas, it comes into existence on the date of its incorporation. For example, the acquisition of operating assets which are necessary to the particular kind of business as distinguished from engagement in more organizational activities, may constitute the commencement of business. The use of the word "may" leaves doubt as to the position of the Treasury Department, and this probably will be one of the situations to find its way into the courts.

New Corporations. A new corporation is one which has commenced business after the first day of its base period. [Section 445(a).] A corporation recently formed, but which commenced business before the beginning of its base period, is not entitled to this special relief, but is limited to the general average method, the growth formula under appropriate circumstances, or one of the other relief provisions relating to new products or services or increases in capacity. This provision covers a portion of the same area which Section 722(b)(4) did in World War II.

To obtain relief as a new corporation, it must not have acquired any property in a tax-free exchange, or from related corporations or individuals.

A new corporation may instead, if it so desires, figure its credit on the general average earnings or invested capital bases but may not use the growth formula as that is reserved to corporations which have begun business before the base period.

Relief takes the form of a reconstructed average base period net income. Income is reconstructed by applying the base period rate of return for the industry to total assets. The cut-off date for calculating total assets

of "older" new corporations, that is, those which commenced business before the beginning of the second taxable year preceding a current taxable year, is the end of the last preceding taxable year ending prior to July 1, 1950, or the end of the third taxable year of the corporation, whichever is later. If the corporation is "newer" than this, the critical date is the end of the last taxable year ending prior to July 1, 1950.

Whether a new corporation is an "older" new one, or a "newer" new one also makes a difference in the treatment of capital additions and reductions. An older one which commenced business prior to the second year preceding a current year, applies the 12 per cent rate which is applicable to invested capital generally, to capital additions and reductions after the cut-off date as under the average earnings method. A newer corporation uses its industry rate of return instead in this computation.

An "older" new corporation may find it advantageous to use the general average earnings method instead of the new corporation relief provision, as the latter requires application of the industry rate on capital additions for the first three years. If these years are subsequent to the base period, the general average method by contrast permits a 12 per cent rate on capital additions. On the other hand, under the new corporation relief provision, an increase in borrowed capital increases assets dollar for dollar until the cut-off date at the end of the third year of the corporation.

Interruption to Output: Temporary Depression. Another type of corporation which may apply for special relief, is one which commenced business on or before the first day of its base period if its normal production, output, or operation were interrupted or diminished during a base period year because of the occurrence either immediately prior to or during that year of events unusual and peculiar in its experience, or its business was depressed because of temporary economic circumstances, unusual in its particular case (Section 442).

The Regulations state that in the event the corporation renders service rather than manufacturer tangible products, the abnormality is to be interpreted as applicable to its particular business. (Regulations §40.442-2)

This relief provision is comparable to that of the World War II law, Section 772 (b) (1) and (2). Industry-wide depression, however, which also was included in Section 722 (b) (2) is accorded relief in a separate section governing depressed industry subgroups.

The excess profits net income for each year in the base period is calculated as under the average earnings method, and reduced to a monthly basis. The highest 36 consecutive months or the 36 months remaining

after elimination of the lowest 12 consecutive months are retained, and the number of months which were adversely affected by unusual events or temporary depression are specifically designated. For these months, the base period yearly industry rate of return is applied to total assets as of the end of the year in which these months appear. If the result is 110 per cent or more of the monthly average income under the regular method, the substitute figures for that period are used.

The above computation is made if the number of months affected is twelve or less. If the number of months affected by the interruption is more than twelve, total assets for each of the years in the base period are calculated and averaged, and the base period rate of return applied to this average.

Changes in Products or Services (Section 443). Relief is also granted to a corporation which has undergone substantial and actual changes in products or services within so much of the three immediately preceding taxable years prior to the current taxable year as falls within the 36-month period ending on the last day of the base period, provided that more than 40 per cent of gross income or more than 33 per cent of net income for the taxable year in which it is proposed to meet the test completely is attributable to one or more substantially different products or services, and provided further that average monthly excess profits net income for that year is greater than 125 per cent of average monthly excess profits net income in the base period years which are prior to the taxable year in which the change first occurred. This provision is intended to replace the "new products" adjustment in Section 722 (b) (4) of the World War II law, although the old law and Regulations were more liberal in granting relief where products or services were merely eliminated, and not replaced by new ones.

If these tests are met by a corporation it may apply the base period rate of return for its industry classification to total assets for the year with respect to which it qualified or at the end of the last taxable year ending prior to July 1, 1950, whichever is later.

Increase in Capacity. The fourth type of corporation permitted to apply its base period rate of return to total assets is one which began business on or before the first day of its base period, and which has enjoyed an increase in capacity for production or operation during the 36-month period ending on the last day of its base period. This provision first was adopted in the Senate bill, and with an amendment eliminating a clause relating to a change in operations and management as a ground for relief was adopted in conference.

In order to show an increase in capacity for production or operation under Section 444, there must have been an addition or replacement of facilities consisting of real or depreciable tangible property only, held by the taxpayer in good faith for the purposes of its business. Accordingly, such intangible factors as changes in operation or management which were significant under Section 722 (b) (4) are disregarded.

"Capacity" is defined in terms somewhat reminiscent of the two year push-back rule of old Section 722 (b) (4) and means the capacity to produce or operate rather than the level of production actually achieved. A corporation qualifies for relief if: (a) its capacity on the last day of the base period was 200 per cent or more of its capacity on the last day of the twelfth month of the base period; or (b) its capacity on the last day of the period was 150 per cent or more of its capacity on the last day of the twelfth month of the base period, and also if the adjusted income tax basis for gain for its total facilities on the last day of the base period was 150 per cent or more of such basis on the last day of the twelfth month; or (c) the unadjusted income tax basis for gain of total facilities on the last day of its base period was 200 per cent or more of the unadjusted basis on the last day of the twelfth month.

Depressed Industry Subgroups. Section 446 grants relief to depressed industry subgroups. The Senate Bill first proposed relief for this group, and with a few changes, the proposal was adopted by the conferees.

In general, this provision may be compared with the second part of old Section 722 (b) (2) relating to industry-wide depression, and Section 722 (b) (3) relating to variant profits cycles and sporadic and intermittent periods of high production and profits which are inadequately represented in the base period.

The Secretary of the Treasury is required to determine and proclaim as a depressed industry subgroup any industry subgroup in the Standard Industry classification having a rate of return for the period 1946 through 1948 which is less than 63 per cent of its rate of return for the period 1938 through 1948. Pursuant to this requirement, he has proclaimed a few depressed industry subgroups, together with their tentative adjusted rates of return.

If a corporation qualifies as a member of a depressed industry subgroup and has made application for relief, it is to calculate its total assets as adjusted for each of the base period years, strike an average and apply the adjusted rate of return to the average assets. As I have stated, the adjusted rate of return is a rate based on the eleven year period 1938 through 1948, and is $\frac{4}{5}$ of the rate of return for the industry subgroup for that period.

Summary of Relief Provisions. Whether many corporations will be able to meet the statutory tests for relief under one of the five provisions remains to be seen. In any event, Congress was of the opinion that it had adequately legislated upon all of the critical areas which were in need of special treatment, taking into account that favorable adjustments are to be made to current year and base period income, that a minimum credit of $25,000 is allowed, and that a growth formula as well as a general average method is provided, that invested capital is permitted much higher rates of exempt return on capital than in World War II, and that capital additions in the base period and subsequent years are more liberally treated than during the last war.

For the reason that Congress considered that it had adequately legislated upon all relief situations, or that few cases actually were presented, it did not revive certain portions of Section 722. These relate to changes in the ratio of borrowed capital to other capital, the acquisition by a corporation prior to the end of its base period, of all or part of the assets of a competitor with a resulting diminution in competition, and changes in management or methods of operation as a ground for relief.

It is likely that as experience is gained in the actual operation of the relief provisions, Congress will find it necessary to liberalize and extend them by further legislative action.

Conclusion

In my introductory remarks, I referred to the underlying philosophy of the Excess Profits Tax Act of 1950 as being to levy a tax upon increased profits presumed to be enjoyed as a result of military expenditures following the Korean outbreak. Many corporations believe that this objective can more easily and fairly be attained by straight and, if need be, steep increases in the normal and surtax rates. However, there is more possibility, it seems to me, for eventual repeal of this excess profits tax law than there is for substantial reduction of greatly increased corporation income tax rates.

At any rate, the excess profits tax law with its many technical adjustments is the one which we have with us. Some credit is due Congress in attempting, at least, to avoid the confused state of relief under Section 722, credit is due the legislative draftsmen who have veritably labored to encompass all contingencies in statutory style, and credit should also be given the Treasury Department for the speed with which it has issued the excess profits tax schedule and the Regulations.

Without doubt, many of the provisions in the statute and in the Regu-

lations will run the gamut of litigation. The very attempt by Congress, the very labors of the legislative draftsmen, and the very speed with which the Regulations were issued, insure troubles ahead.

If we are to have an excess profits tax law, however, the wide selection of alternative methods for calculating the excess profits credit, and the adoption of the favorable base period years 1946 to 1949 in the present law, provide a fairly workable basis of taxation.

CHAIRMAN MCCLOSKEY: Our next speaker graduated from Longwood High School in Cleveland and completed his study of accounting at Fenn College, Dyke School, and Columbia University. He qualified for his Ohio CPA degree in 1932 and in 1933-34 served as Treasurer of the Cleveland Public Auditorium and Stadium, after which he was in public accounting practice in Cleveland for a number of years. With the advent of the war he served with the Ordnance Division of the Army from 1941 to 1945. He has served as Deputy Controller of the Economic Cooperation Administration since April 1948.

He is the author of the "CPA Review and Representative Problems," and is a regular contributor of technical articles to the *Journal of Accountancy* and other national accounting publications. He is a Professor of Accounting at the Evening College of Columbus University in Washington, D. C., and is a member of the Ohio State Society of CPA's, the American Institute of Accounting, the National Association of Cost Accountants, and the American Accounting Society.

It is my pleasure to present to you Mr. Clark L. Simpson who will speak on "Accountants Aid Marshall Plan and Vice Versa." Mr. Simpson.

ACCOUNTANTS AID THE MARSHALL PLAN AND VICE VERSA

By CLARK L. SIMPSON
Deputy Controller, Economic Cooperation Administration, Washington, D. C.

At the close of World War II Europe was devastated by terrific war damage and by the lack of industrial production which is essential if a country is to enjoy a healthy economy.

Our own country, although it had contributed to the success of victory, had suffered no internal damage as a result of war. We had contributed in manpower, munitions, and money, but no bombs had fallen on our cities nor had we been invaded by enemy troops. Therefore, we were in a better position to give the other countries a helping hand than any other nation in the world. As a result of our aid programs which have contributed so much to the restoration of world trade and to the stabilization of the economy of Europe, we automatically became the economic leader of the world. This was a position which had long been held by Britain and was a new role for us. It is a role to which we must become accustomed as it is now apparent that the United States will hold the lead for many years to come. We cannot sidestep this leadership which has been thrust upon us.

You know, as I do, that the problems of Western Europe are to a very intimate degree our problems—that what happens in Europe in the next five years will have a determining influence on what happens in the United States in the next fifty years. For example, if Western Europe should fall under the domination of the Kremlin, if nations now free should become police states under Russia, we would have only one course of action, we would have to increase our regular defense expenditures to 25 or 30 billion dollars a year—year in and year out—and the U. S. would operate as an armed garrison. Ruinous deficits would come into existence unless offset by unbearably heavy taxes. All types of controls would have to be imposed and rationing of a type never known in the history of our country would be necessary. It would not be long until our free enterprise system would become only a memory. All we would ever know, assuming we avoided war, would be a continuously uneasy and jittery peace.

As an alternative, if Western Europe, instead of falling under the domination of the Kremlin, remains free and becomes strong and pros-

perous, if the United States continues strong and prosperous and if the free peoples of the world remain united, I believe the evil plans of the men of the Kremlin for world conquest will necessarily fail and will fail so completely that even Russia will cease to be a slave state. Actually, Russia cannot hold what she has now unless Western Europe is brought into her orbit. She needs the steel, the coal, and the oil of Western Europe, but more importantly she needs the skills of Western Europeans. Without these resources, she cannot succeed even in consolidating her present holdings. All of her conquests have been minorities overwhelming majorities. Eventually these majorities must assert themselves anew. When the break will come is unpredictable, perhaps it will be at Stalin's death. He certainly is the only Russian leader who commands the respect and obedience of both the military and the commissars. Generally, evil institutions contain in themselves the seeds of their own destruction.

If I may, I should like to review briefly the situation at the time ECA came into existence. The end of World War II found most of the free countries of Europe in a very serious economic condition. During the war most of the countries had converted their industrial plants to war production. Many of their facilities normally used in industry had been bombed out of existence. The dollar reserves were almost completely exhausted.

It was essential that industrial production be resumed in Europe in order that exports might be available to increase the dollar income. Imports were needed badly from dollar areas, and such imports could be financed only with U. S. dollars. As stated previously, the dollar reserves were depleted. There was no industrial production to be exported to earn such dollars, and it appeared impossible to revive the slipping commerce of Europe. When General George Marshall made his famed Harvard address he emphasized the fact that American aid was vitally important if the commerce of Europe was ever to be resumed. He also emphasized the fact that without the commerce of Europe, the economy of the United States would necessarily suffer.

The Europeans who desired to resume industrial activities needed to replace exhausted machinery and needed to procure raw materials in dollar areas. These individuals had ample supplies of local currencies to buy the items which they needed; the financial institutions of their countries lacked the U. S. dollars to make possible the exchange of such local currencies for dollars, which would have permitted purchasing in dollar areas. The Marshall Plan made possible the exchange of local currencies for dollars in order that such transactions might be consumated. General Marshall further recognized, however, that as a result of the serious damages to

highways, public utilities, dams, and waterways, more than mere exchange was needed in order to stabilize the economies of the various European countries. He, therefore, conceived the plan whereby the individual purchaser in Europe would pay for the product he wished to buy in the dollar area with his local currency. Such local currencies would be deposited in the foreign banks and made available for use by the participating country as specifically authorized by the Administrator of ECA. These local currencies were to be made available for general stabilization purposes.

When the original ECA Bill was passed, Congress specifically provided that such funds were to be spent in Europe for the improvement of the economy of the European participating countries and further provided that at least 5 per cent of such funds should be used for U. S. administrative costs and for the purchase of strategic materials by the United States government.

When the ECA Bill became effective and Paul Hoffman of Studebaker Corporation was appointed Administrator, his first act was to appoint as Controller one of the outstanding accounting writers and practitioners in the country, Eric Kohler, a CPA, and a former accounting professor and a trail blazer in accounting techniques. At that time I was winding up my service as Assistant Director with Corporation Audits of General Accounting Office and planning a return to the practice of public accounting in Ohio. The Comptroller General requested me to assist in setting up the accounting system at ECA for 30 days, to work with Mr. Kohler. Before the 30 days were up, Eric Kohler asked me to carry on with him as his chief assistant and I refused. I felt I had been associated with government far too long already and that an assignment in a new agency would be too trying but after a series of refusals, I agreed to continue for at least one year. It has been a long year since April 1948, but I have enjoyed the full 365 days of it.

We have made good use of CPA's throughout the U. S. We have retained public accounting firms for special services in the U. S. and have used them throughout Europe. We obtained certified men to head all our branches in Washington and as Controllers in most of the 25 countries of the world in which we operate. We have streamlined our procedure, cut red tape like it was kite string, and have certainly led the way to modernizing the system of accounting in government. We use accrual accounting and present monthly balance sheets and operating statements. We participate in management and make certain that full use is made of accounting reports by management. We use what Dr. Vatter called activity account-

ing which, as he stated this morning, is one of Eric Kohler's specialties. We've administered the shock-treatment time and again to government old timers. For example, at the start of ECA it was vitally important that fast action be taken on getting goods to Europe if ECA were to succeed. We went to the Comptroller General with a plan for paying American suppliers within 24 hours of receiving their billings and making our administrative audits subsequently. We emphasized the importance of speed, and he agreed.

Later we thought up a more radical procedure which even we felt we wouldn't be able to sell. That was to permit foreign countries to draw checks on U. S. Treasury to pay American suppliers. Imagine suggesting that a foreigner be permitted such action. At first, Comptroller General Warren was violently opposed to such a procedure. Then we began to describe the benefits and safeguards we proposed. He helped us sell the Treasurer of the U. S. on the plan and over 17 foreign countries were at one time issuing checks on the U. S. Treasury—checks which were negotiated through banks just like ordinary commercial paper. And it has worked out beautifully and our controls have kept it in hand.

Our CPA's throughout the world have contributed to accounting improvements in the respective countries to which they are assigned. They have actively associated themselves with professional accounting groups in these countries and have truly assisted in cementing the relations between our countries.

On Wednesday of this week I visited the College of Business at Cornell in Ithica and lectured a group of French management representatives who are being given an indoctrination course in accounting there. These men are essentially in production work, but we want them to know enough about Accounting and Controllership to know what to expect or demand from their Controllers and Chief Accountants. My subject was, "How a Controller in Business Should Serve Management." It gives me a good healthy feeling to discuss commercial and industrial matters on occasion instead of just government. In my discussion I emphasized the importance of better accounting education and better textbooks. Incidentally, last week I met with the American Accounting Association at Athens, Georgia, where I also mentioned the need for improved accounting texts. I told these French businessmen that better texts and better training were not the entire answer.

As indicated by some of my previous comments, aid to Europe under the Marshall Plan is not confined to the furnishing of commodities and production equipment. Indeed, one of the very important features of the

operations of ECA is the Technical Assistance Program, or the aid actually and generally gratuitiously given by the U. S. businesses to interested enterprise abroad.

Merely making production machinery and raw materials available to a country is not sufficient to insure acceleration of production even with extensive, outside financial assistance. The ability to absorb capital effectively may be limited seriously by the inertia of custom and tradition in connection with habits of work and methods of production, a lack of enterprise and unwillingness to take risks. Resistance to new methods is generally greater where change is most urgently needed. A basis for resistance to American technical assistance is said to be a misunderstanding of our foreign policy objectives, of which three predominate:

1. The support of political democracy.
2. Enlistment of the cooperation of other countries in defending free nations against aggression.
3. The improvement in the well-being of their peoples. The third is vitally important if the first two are to succeed, and it is in the third category that most of the ECA technical assistance projects fall. Our purposes have someimes been thought to include a desire to impose on others the American culture and economy which some do not wish to adopt. This, of course, is not our aim. We have no selfish or ulterior motives.

U. S. techniques and procedures are made available by sending experts abroad to teach interested groups and by bringing study teams into this country to learn by observation, under guidance of experts, our methods and operations. Both means have proved their merit and as a result of such projects:

1. Austria has improved agricultural productivity and reduced food import requirements through their farmers having availed themselves of the newest developments in agriculture.
2. Belgium, through introduction of better drainage routines, should be able to reclaim close to one million acres of fertile land.
3. As a result of visits to coal and metal mines in New York, Pennsylvania, Ohio, West Virginia, Indiana, Illinois, Michigan, Montana, and Utah, Belgium coal production should be greatly increased with costs lowered through adoption of better methods.
4. Denmark's milk industry should materially benefit from a study of hygenic and technical matters in this country.
5. France sent over a 20 man team of foundry owners, managers, engineers, foremen and molders to make a six week study in the field of steel and malleable castings. This should benefit most of France's basic industry paving the way for increased production of farm machinery, railway, automotive and shipbuilding equipment, rolling mill and steel works equipment, and products for mining, chemical and mechanical industries.

6. Studies have also been made by representatives of many countries to insure the latest teaching in their universities; studies have been made of peanut production, irrigation practices, poultry culture, artificial insemination, animal husbandry, the forest and lumber industry, the garment industry, rubber manufacturing, shoe production, the U. S. welding methods, Farm Youth activities, farm mechanization, land use, refrigeration, tourist techniques, potato production, the field of plastics, and a host of other subjects of equal importance, including accounting and controllership activities to be discussed more fully. American industry and American labor have opened their arms to visitors, and of equal importance, they have opened their plants, stores, and offices to them and have given freely of their know-how that these visitors may return to their homes better qualified competitors, just another case of "Macy telling Gimbels."

ECA has many times called on the American Institute of Accountants, accountants in practice, the Controllers Institute, the National Association of Cost Accountants, and college professors throughout the U. S. for help in indoctrinating foreign groups. A national CPA firm, specializing in hotel accounting, was of real assistance in connection with the study of tourist techniques. A Baltimore CPA, no longer in active practice, came out of his retirement long enough to undertake a study for the Turkish Government (but financed by Technical Assistance Funds) of certain of their operations. (Of course, we should also state that many Institute members accepted appointments on our staff in Washington or in our Controllers' Offices in Europe and Asia and have been a credit to the profession. Such qualified help has made our international responsibilities for handling over nine billion U. S. dollars in two years much lighter).

In Greece, in 1948, there was practically no public accounting profession in existence. Commerce and industry kept records of a sort, frequently duplicate and triplicate sets of books each reflecting "facts" to serve their special purpose. The ECA Controller actively interested himself in the needs of business, worked with universities in establishing courses, importing qualified instructors, and in other ways worked for the long-range improvement of the profession of public accounting. During January 1951, the ECA Controller in Athens attended meetings with a committee appointed under Greek law to draw up legislation to legally recognize the profession of public accounting, to issue certificates and to regulate the practice. That, I think, is progress!

Our Controllers in various countries have voluntarily rendered technical accounting services to numerous governmental agencies. We have assisted on tax matters, on controlling costs on special projects, on calling attention to the serious need of internal audits in agencies, and on governmental accounting. Offers of such help have always been well received

and we have encouraged our staff to take on such extra-curricular activities for the improvement of accounting techniques on an international scale.

We arranged for a study to be made by an expert on public finance of the Turkish governmental structure to point out means of improving the fiscal system of that republic. The report which followed the survey outlined many of the fiscal problems, discussed the Turkish revenue system together with pertinent matters relating to the various taxes. Our expert recommended the installation of modern accounting equipment in the Ministry of Finance, reorganization of the tax administration machinery, improvements in budgeting, better training of Turkish personnel, and the obtaining of specialists to undertake revitalization of various units of the government. This is, of course, a long-range program.

A certified public accountant from the U. S. made a five month study of a foreign governmental policy responsible for financing and managing the mining and electric power resources of one of the participating countries. His purpose was to recommend a modern, efficient, up-to-date system of technical and commercial accounting for the involved industries. He found that the established procedure contained all the "elements" of a modern accounting system but that in actual operation, there was no resemblance to commercial practice. Reports were always late, too late to be of use to management. Bookkeeping procedures were too involved and were ancient, duplication was prevalent, the routine was slow, inaccurate, and costly. His report pointed the way to a system of accounting which would simplify their bookkeeping, streamline their procedures, and give them timely and meaningful accounting reports—and all this with a reduction in their overall costs. A recommendation was made for an accounting manual for although numerous branches were involved, there had been no uniformity. Actually, the accountant practically suggested a complete discard of the existing methods to make it possible for modern commercial management policies to be utilized efficiently.

In the United States, statistical services are available relating to most industries and activities. The Bureau of Agricultural Economics of the Department of Agriculture is especially known for its work and ECA has made use time and again of these experts on behalf of participating countries. Dr. C. F. Sarle, Division of Special Farm Statictics, went abroad for us as a special consultant and helped in organizing similar services for participating countries. In a report made in late 1949, he emphasized that the need for a modern and scientific statistical service was being recognized by an increasing number of agriculturists, economists, and businessmen

throughout the world. He stated that even accurate statistics are of little value unless they are timely, that as a country improved and expanded economically, the need for up-to-date information concerning agriculture increased. By being able to forecast crop yields, a country can foretell foreign currency earnings from exports and thus determine more nearly their needs for foreign exchange. Dr. Sarle's report went into detail as to the organization and functioning of such an operation. His report was used by one of the countries as support for their budget request for funds to staff such an organization and their plan should provide for the expanding economy with reliable, timely, and highly useful agricultural statistics, a service that country can be justly proud of—thanks to the work of an American technician.

Financial men in the U. S. were quite interested in the Danish proposal to send bank officials and select employees to study the organization and financing systems of the American banks. No one was to be sent unless he already had theoretical training and practical experience. The Danes were especially interested in the American Institute of Banking, in their excellent training program with a view to adopting many of its features. They were interested in mechanized accounting, in proof machines, check sorters, punch cards, bookkeeping machines, calculators, and mailing machines. They desired to study the miraculous systems in use in the larger banks where "daily statements are usually available to the management two days after the date at which the statement is made." All in all, they wanted a chance to study and duplicate the progress made in banking methods, and an ECA technical assistance project, with the wonderful cooperation of American bankers, is making it possible for them to realize these desires.

The government of Greece was weak with regards to its Budgetary and Accounting, but their Prime Minister and other officials were aware of the situation. Through ECA, arrangements were made for a study by the Public Administration Service of Chicago, which was also to propose a program designed to improve the situation and to recommend a plan for better training of the personnel to result in more effective federal administration. They found the accounting procedures, forms, and records cumbersome. Despite decentralization, most records were completely duplicated elsewhere. The inconvenience of doing business with the government, as a result of the time consuming disbursement procedures, resulted in increased costs from vendors who anticipated such inconvenience and charged accordingly. Cost accounting records, when they existeed, were inadequate.

Practically no accounting equipment was in use and it was impossible to obtain accounts and adequate information promptly. The Public Administration Service in presenting its report, said in part:

The program presented for the improvement of budgeting and accounting practices in the Kingdom of Greece is based on the belief that the development and installation work should be performed by officials and employees of the Government with only such outside technical consulting services as are necessary to give direction to the project and to assure satisfactory results. Under such an approach a small group of employees will receive intensive training in the techniques of the analysis, development, and installation of systems; will become thoroughly familiar with the objectives of the program and the nature of the work performed; and will understand the reasons for the changes which are made. They will, consequently, be able to serve as the core of the technical staff needed to insure that the new systems are operated properly, to carry on continuing analysis and improvement of the systems installed, and to provide for study and improvement in other areas of financial administration.

The preceding portion of this report points up the need for the revision of budgeting and accounting administration in a number of respects. One of the major problems in deciding upon a program for developing and installing such revisions is the difficulty in determining how extensive the program should be. Cost accounting is a very helpful administrative tool, for example, but it would seem that the need for improved general accounting practices transcends the need for cost accounting at this time. Likewise, the program might be extended to revisions in the internal accounting of all the legal entities of public law carried on by the Government, but it is believed that the present program should be restricted so as to permit revisions in the over-all accounting and budgeting administration at the earliest date possible.

Specific recommendations made included:

A determination of the necessity or desirability for the maintenance of each fund or account.

The development of simplified fund and cash account structures, together with the drafting of revisions in legal and administrative provisions necessary to put them into effect.

A review in detail of the classifications used and the practices followed in the general accounting for assets, liabilities, reserves, and surpluses of the several funds, and the tie-in of these accounts with the expenditures and revenue accounts.

The development and installation of such revised practices and account structures as are deemed desirable.

A determination as to fiscal data needed by administrative and legislative officials and the public.

The development and installation of a system of reports which will furnish such information promptly and in a useable form.

Installation of improved accounting equipment.

Provision of a program for training for the employees concerned in the operation of the revised system.

It was estimated that about 18 months would be required to perform the provisions recommended.

One of the most interesting accounting teams visiting the United States under our Technical Assistance Program was the group sponsored by the Anglo-American Council on Productivity. This Council was formed in the autumn of 1948 on the initiative of Sir Stafford Cripps, the Chancellor of the Exchequer in Britain, and Mr. Paul Hoffman, ECA Administrator in the United States. It is composed of representatives of management and labor in both countries. The purpose of the Council is to promote economic well-being by a friendly exchange of knowledge in the realm of industrial organization, methods and techniques, and to assist Britain's industry to raise the level of its productivity. This organization had previously sponsored a number of projects involving trade associations and they concluded that an accounting team should be sent which would represent various associations of chartered accountants, certified accountants and cost accountants throughout the United Kingdom.

The main aim of the team was to determine how American management is assisted by accounting in the achievement of high productivity. It was desired to survey as wide a field as possible rather than concentrate on any one industry. The itinerary arranged by ECA included visits with the American Institute of Accountants, with the Controllers Institute of America, and with the National Association of Cost Accountants. Visits were also made to Columbia University, Harvard School of Business, Massachusetts Institute of Technology, Roosevelt College, and Northwestern University School of Commerce. Six industrial firms were visited in New York, four in Boston, one in Bethlehem, Pennsylvania, two in Pittsburgh, one in Baltimore, three in Endicott, New York, one in Louisville, one in Peoria, Illinois, twenty in Chicago, thirteen in Cleveland, one in Elmira, Ohio, four in Dayton, one in Lancaster, Ohio, and one in Schenectady. Visits were also made to public accounting firms in various areas.

Upon completion of the survey, the group made up a 72-page report, which contained many interesting conclusions. They marveled at the effectiveness of management and considered it the greatest single factor in American industrial supremacy. Effectiveness of American management and accounting, they concluded, did not rest on the technical superiority but on thorough application of techniques which are equally well-known in Britain.

They referred to American belief that unit costs must be reduced each day and every day, week in and week out, year in and year out, and con-

cluded that this thought is so natural to American management and accountants that it is taken for granted, that they are aware that if unit costs are not continuously reduced, the standard of living will not rise and that raising the standard of living is practically a religion in America.

This group emphasized that it is highly beneficial to an organization when the manager has had training at one of the business schools, that they then learn the value and utility of financial statements and learn what can be inferred from them. They also indicated that in America, the accountants realize service to management is one of the main aims. The group seemed almost surprised that in this country the Controllership ranks with top-management and that both management and accountants recognize that the primary purpose of accounts and costs is to guide management in planning the future, and that this permits management to base its decisions on facts and reasoned forecasts.

They pointed out, however, that all Controllers emphasize that they must constantly and continuously show how figures and statistics contribute to effective management. The British visitors attribute the vigor of American management to the knowledge of the individual manager of his responsibilities and power and possessions, of the freedom and confidence that lets him get on with the job.

It was indicated that practices in American companies varied as greatly as those in Great Britain, but that the standard of information furnished management was higher, that probably the most valuable information was conveyed to management by frequent discussions with the Controller and his staff, and in special reports dealing with current problems and likely developments. These Britishers complimented us on the friendliness and understanding existing between the Controller and the production department, and indicated that the Controller's services are considered essential to production.

Emphasis was placed on the fact that financial statements are prepared with unusual promptness by American accountants, and that frequently such reports are handed out personally by the Controller or a senior member of his staff, with verbal explanations available on the spot. In its report, the team recommended that management, in considering the future, should make the fullest use of budgeting based on accounting data, that top-management should bring industrial accountants into consultation in early stages of formulating policy, that industrial accountants should concentrate on producing information to serve as a guide to policy and action, that consideration should be given to the publication of fuller information in annual reports, and that management should take an active interest in

the extension of the institutes and colleges to teach business administration at all levels, giving serious consideration to the American practices in the field. This is only a brief summary of the report which is to be given wide distribution in Britain and which will undoubtedly give the British accounting profession some of the benefits of the study made by this group.

Two other accounting projects which have been approved will soon bring about sixty additional accountants to this country for surveys and study of American accounting methods. The first group consists of cost accountants from Austria, Belgium, Denmark, France, Greece, Germany, Iceland, Ireland, Italy, Luxembourg, Norway, Netherlands, Portugal, Sweden, Trieste, United Kingdom, and Turkey. This group will be given an orientation course at the New York University Graduate School, followed by approximately five weeks of field visits. On these field trips, the visitors will have the opportunity of acquainting themselves with practically all phases of cost accounting and controllership as related to industrial and commercial organizations in the New York, Philadelphia, Pittsburgh, St. Louis, Indianapolis, Cleveland, Detroit, Chicago, and Milwaukee areas.

They will also visit in Washington at the Bureau of the Budget, the Department of Commerce, ECA, and their respective Embassies. Before leaving this country, they will have a panel discussion in New York and be given an opportunity to ask questions and state any particular problems which they have encountered on which they need additional help. The Controller's Office of ECA assisted in planning the course to be given by the University and also in scheduling a number of the field trips. The request for this project was the result of a coordinated effort of all countries. The application indicated that these countries recognized an improvement in management accounting would make a real contribution to increased productivity, and they pledged that the benefits of such a trip would be extended to other accountants in the respective countries through the report which would be drawn up by the visitors.

It is contemplated that this group will learn firsthand many of the methods by which costs are determined and carried in the records, how costs are distributed by American industry, the manner of treating discrepancies between estimated and actual costs, the effect of costs on productivity of a firm, and how cost staffs are trained in this country. The itinerary of this group was arranged through the Controllers Institute and through the Association of Cost Accountants, both organizations having contributed heavily to the success of many of our accounting projects.

Another study group coming to this country about April 1 consists of a number of expert accountants from France. The important part played

by accountants in the French economy is indicated by the fact that 2,060 chartered accountants and 6,900 certified public accountants service about 400,000 enterprises in their country. In applying for approval of this project, French authorities indicated they considered that it would be highly profitable for the French accountants to get a firsthand view of American techniques and methods to determine how such techniques contributed to industrial, commercial, and administrative efficiency, and increased the productivity of the respective firms. The individuals expressed interest in visiting successful firms to determine, among other things, what contribution expert accountants have made to such success, what effect their suggestions had upon the policies, how the accountant expresses these suggestions, how active American accounting associations are; how accounting teaching in the United States differs from that in France, and if small firms have as great a benefit from the public accountant as large firms.

In closing, I should again like to emphasize that American business has given its all for our ECA Technical Assistance Program. Public accounting firms, too, have joined business and schools in attempting to make our program successful. All of the American national accounting associations have given us the finest of cooperation and have held out a helping hand to their professional brothers on the other side.

Time has not permitted me to give other than a limited discussion to our Technical Assistance Program. It has been sufficient, I believe, to show you that a flow of ideas as well as a flow of goods have been set in motion by the Marshall Plan. In the long run, this may prove to be the most dynamic feature of the entire U. S. aid program. It is strange indeed in these days of intense nationalism to see a major producing nation deliberately encouraging potential competitors to make use of its most advanced ideas and practices; strange and new, yes, but intelligent an entirely consistent with the principles of mutual help upon which the Marshall Plan has staked its success. It is the mutual help of this technical assistance which will continue to benefit the countries of the world and which will be remembered and appreciated long after the effect of the material aid which we have given has vanished.

FOURTH SESSION

FRIDAY, MAY 18, 1951—7:00 P.M.
Main Ballroom, Neil House

Address: "The Outlook for American Manufacturers—An Economic Survey"

EARL BUNTING, *Managing Director, National Association of Manufacturers, New York, New York*

Presentation of distinguished accountants elected to The Accounting Hall of Fame.

THE OUTLOOK FOR AMERICAN MANUFACTURERS—AN ECONOMIC SURVEY

By EARL BUNTING
Managing Director, National Association of Manufacturers, New York, New York

While I am a little uncertain about the outlook for American manufacturers, I have no reservations about the outlook for those accountants whose clients include manufacturers! And, in view of the nature of this meeting and the type of attendance represented here, you should certainly have interest in at least that part of my remarks.

Let us look at just what a manufacturer who participates in the defense program is now up against. In the first place, a substantial part of all defense contracts will be placed upon a "negotiated contract" basis.

After such "negotiated" contracts have finally been agreed upon will come the process of quarterly redetermination and repricing based upon experienced costs. Then, after each contract has been completed, the manufacturer must submit to renegotiation in spite of any previous agreements. He is now ready to compute his normal tax, and that makes him eligible to join the ranks of payers of excess profits taxes.

Subsequently, if the business is still in existence, and if the average profits of his industry have exceeded 85 per cent of the net of the industry in an average of the three best years in 1945-49, he will be in for more trouble on pricing his civilian goods. Or his experience may create trouble for his competitors, who may or may not be handling defense contracts.

Need I remind you members of the profession of accountancy that the various steps I have just outlined have created an opportunity for your business which will automatically elevate you and your compatriots into the atmosphere of "high bracket" taxpayers? The lawyers in Congress used to write laws which forced employment of members of their craft. By the looks of things, there must now be a lot of accountants in Congress.

Need I ask "What is the outlook for American manufacturers?" If I mention the subject at all, I am afraid I shall have to make it in the form of a questions, because I am sure that such information as is available to me upon this subject will not serve to shed much light upon it.

My subject tonight is one which was assigned to me many months ago at a time when it looked as though it might be possible to hazard a

few opinions upon the subject. The provisions of the Defense Production Act of 1950 did not look too vague or terrifying at that time. There seemed to be a pretty positive conclusion to be had from that law, to the effect that if wages were to be stabilized, prices would have to be so treated, as a simultaneous transaction.

Now that several months of "fair deal" gray matter have been devoted to an exploration of the highways and by-ways of this particular piece of legislation, it seems that the Act could not possibly mean what it indicates, or what most businessmen thought it was created to do.

Any idea that prices and wages were tied together, and must be kept in that relationship, has proved to be naive. So has the feeling that a law had been written which would produce such a result.

The second thing which I am supposed to do tonight is to make an economic survey—which is a lot more solid ground to operate upon!

My dictionary defines economics as "the science that investigates the conditions and laws affecting the production, distribution, and consumption of wealth, or the material means of satisfying human desires."

Great economic progress has been made in the past twenty-five years. Twenty-five years ago most economists were agreed that economics had not yet attained scientific stature because an insufficient body of scientific laws had yet been developed to so dignify it. What a great thing the New Deal has beeen to get that definition accepted by Mr. Webster!

Maybe we can get a few facts together which might have some value in an attempt to make an economic survey of what is ahead for American manufacturers.

A good, resounding, starting fact is that any kind of a business that does not make money is not going to be around too long. People have an insatiable appetite for the products of that particular business, but if it cannot earn a profit, the public may have to accept something else. That is a good, basic fact, but our government has at least six direct ways to prevent a manufacturer from earning any return at all.

Another sound point we might make is that a business that expects to be around a long time had better be certain that what it—or you—calls a profit, will really turn out to be one. I can think of several questionable accounting practices which tend to overstate profits, but I can think of none which does such irreparable damage as the one which fails to recover the full replacement cost of assets. Since the purchasing power of the dollar hit the toboggan, corporations of this country have paid literally billions of dollars extra on taxes on income, because they were forced to take depreciation upon a basis of original cost instead of replacement cost.

Some members of your profession will have to answer this question some of these days, and I pray you will do so before all of your clients go broke.

Wihle I am complaining, maybe it would be well for me to get another idea or two out on the counter.

Please tell me how a corporation can claim to have earned a profit when such a figure does not provide for some important item of expense, like federal taxes on corporate income? You might as well allow it to state that it made "X dollars" before provision of wages for employees.

In the past twenty-five years, federal taxes on corporations have risen from $916,000,000 to an estimated $13,560,000,000. It is further estimated that in the next fiscal year they will be raised almost fifty per cent more.

There are a lot of vicious people in this country—as well as in other parts of the world—who would destroy the free, private, competitive enterprise system which has made this nation the hope of the rest of the civilized world. They love to say that the Z corporation made "X dollars" in 1950 which was some fantastic percentage higher than it earned in 1949; all "before" taxes, of course, which they never mention.

As a matter of fact, all corporations in this country made during 1950, "after" taxes, and "after" inventory profits, less money than they made in either 1949 or 1948. But, a lot of people don't think so, and it's your fault and the responsibility of your clients to see that the correct information is presented to the public.

Nobody that I know wants to use a war as the opportunity to get rich, and nobody should have such an opportunity.

In spite of the scare buying which mopped up everything in sight for months after Korea, American factories kept grinding out production to the point that in spite of threats of price controls and "roll-backs" coming out of Washington almost hourly over a period of months, producers in many lines are now waking up to the fact that they did a substantial part of 1951 business in 1950.

And a lot of retailers are wondering what in the world to do with warehouses crammed with goods which the public is shying away from. An "inventory profit" of 1950 could well turn out to be something else before this year is over.

In the past ten years, corporations of this country invested well over a hundred billion dollars in bricks, mortar, and machinery, and one reason that a surplus in some lines now exists can be attributed to the fact that the physical volume of industrial production is now more than double the aver-

age of the base years of 1935-39. The physical volume of manufactured goods jumped from an index of 168 in July, 1949, to 234 in March of 1951, which is an increase of 40 per cent in 20 months.

When the Japanese signed the articles of surrender in 1945, American business confidently expected that it could look forward to many years of peace in the world and prosperity at home. In spite of the fact that money had to be borrowed in absence of a market for equity securities, management felt that the long-term look of things justified the unavoidable indebtedness.

The Korean episode should make us grateful that businessmen took those chances in hope of earning a profit in peace-time operations.

A principal concern of all of us should be that business be permitted to earn reasonable—and "real"—profits during the period ahead of us. Because we are now embarking upon a voyage which may well encompass the remaining lifetimes of many in this audience, we must have solid economic strength in order to attain whatever military might we must provide.

It has been truly said that whatever we face in this country is not an economic problem because we have the potentials. Neither is it a military problem, because here, also, we have the potentials. But it is a political problem. Unless we exercise informed and statesmanlike political decisions in the days ahead, we may never find it possible to call upon our full economic and military potentials.

That makes it vital that the widest possible degree of public understanding be created because an informed public will make the right decisions. Here, again, I would like to inject some additional facts. Let us begin with the subject of inflation. I do not suppose there is a person in this room who disagrees with the statement that inflation simply means an excess of the supply of money in relation to available goods.

If we are to treat inflation we must deal with the question of the money supply, on the one hand, and with maximum production on the other.

The real determining factor as to what the nation must live upon is the volume of goods, not the money supply. The size of the defense program we can sustain is not determined by the amount we can afford to collect in taxes, but by the amount of our production which can be devoted to military and other government purposes without undermining the overall strength of the nation.

If we can afford to devote 25, 40, or 60 per cent of our production to the military, we can afford to have the same percentage of our income taken in taxes.

Whether we collect the equivalent amount as we go along will influence what we have to pay, but it will have no influence upon how much is available in the market.

Government expenditures which are *not* necessary to national defense must be reduced to a minimum.

Every dollar saved—and there are good estimates ranging from six to eight billion dollars—will ease the tax burden of the American people and can be applied to the "pay-as-we-go" tax policy we must adopt to stop inflation.

The most authentic news from Washington is to the effect that, in the absence of an all-out "shooting war," we are entering into a defense program of an indefinite duration.

Such a program must meet three necessary requirements:

1. It must give us the maximum defensive strength over the long haul;
2. It must make us ready for full mobilization, if and when required; and
3. It must guard the health and living standards and the long-term welfare of the people.

With these guiding principles in mind, I submit that the following program is in the best interest of all the people: (a) to make them safe from military aggression, (b) to protect their economic well-being, and (c) to maintain maximum personal freedom.

Because, in the long-run defense program now facing us, we will need every ounce of our economic strength, now, more than ever before, we must have a sound currency.

We dare not repeat the tragic fiscal mistakes of World War II. During that era of fiscal and economic experimentation, there were those who thought price controls, in the absence of sound fiscal policies, could do the job. Our experience with price controls in the recent war showed that they did not prevent, but only hid, temporarily, the inflation resulting from deficit financing. Our American people paid for it in black market prices, and they are still paying for it with 53-cent dollars.

This is a lesson which we can ill-afford to ignore.

In this period of defense preparation, we must make certain of a steady flow of materials needed for the military program. Government priorities and allocations for such a purpose should be confined to those necessary for the defense program. And the best estimates in Washington right now do not envision military expenditures during the foreseeable future in excess of 18.3 per cent of the current gross national production

This compares with the peak of production for all military purposes of 46.1 per cent reached in 1944, and our productive capacity in this country has increased substantially since 1944.

After the military needs in this long-term defense period have been provided, the free market is the most effective instrument, as it has always been, for stimulating production of what needs most to be produced, and for distribution of supplies remaining for civilian use.

Inflation simply means an excess in the supply of money in relation to available goods. Therefore, the private credit system—commercial banks, consumer credit, etc.—must be prevented from adding to inflation.

Our Federal Reserve System possesses the powers to control the money and credit system. Using the interest rate and whatever technical powers are necessary to restrict credit, it must prevent our credit system from feeding the fires of inflation. For the progress that is being made on this front, both the Reserve System and the banks deserve public encouragement.

Whether we want to admit it or not, we always "pay-as-we-go," either in taxes or inflation. The sound way is to cover the cost of the military program, as well as other government expenses, by taxes.

Contrast this philosophy with what we did in World War II. We paid about 40 per cent of our government outlays with taxes, and the rest by inflation—inflation which doubled everybody's prices, including the government's. Taxes imposed to cover expenditures must have the effect of curtailing spending. They must not curtail savings and investments.

The real formula to prevent inflation is to reduce the amount of buying by an amount as great as the reduction of goods available in the market after defense needs have been met. If this is not done, prices will be under constant pressure and will rise regardless of any system of controls. If the program is financed by taxes representing funds which would otherwise be saved and invested in further production facilities, inflationary pressures will be increased. As the funds are spent by government, they will come into the consumption market, and thus increase the money supply out of line with the volume of goods available.

The only kind of tax program which will provide a completely opposite effect will be one based upon either excise or sales taxes with no consuming group being protected from carrying its share of the burden. And by this I mean that some method must be devised to reach by consumption taxes, the 140 billions of dollars of personal income not now reached directly by taxation. Only 90 billions, out of total personal in-

comes of 230 billions at current rates, are subject to income taxes. The spending pressure of the untouched 140 billions is the real point of attack.

Higher incomes will *not* yield significant amounts through increases in rates, because there are only 12.5 billions of taxable income among all people earning in excess of $6,000 per year. And, these people are now paying 6 billions in Federal taxes. If *all* of their taxable income were to be seized, it would only produce 6.5 billions more.

The only solution is to tap the untouched 140 billions through consumption taxes. Thus, if the credit system is held in check and if a dollar is correspondingly taken out of the consumption market for every dollar spent on the defense program, there can be no overall increase in prices.

Any businessman who might be tempted to increase prices would find that, unless the public was willing to sacrifice something else, he would simply price himself out of the market. There would be no upward inflation trends. And since business could not risk price increases, there would be no need for wages to be brought under government control.

Price and wage controls are ineffective economically because they create a situation of "repressed inflation." And they cannot be sustained politically. They have the effect of restricting production by throttling incentives. With their accompanying shortages, they breed black markets. They are illusory in character, with painful after-effects in inevitably higher prices.

The present compelling necessity is to gear our economy to absorb an 18 per cent level of defense production over the long-term pull, which may run into many years. Fiscal mistakes in that period could be fatal. Only a strong economy—and only the free are truly strong—can produce the military strength so vital now and in the days ahead. The Statue of Liberty, not the American dollar, must again become the symbol of America at home and abroad. Only thus will we offer to peoples of other lands a system of life, of freedom and opportunity, which could be expected to turn from statism in any form.

An experienced American observer, Michael L. Hoffman, recently wrote from Geneva:

> The rapidity with which the United States has embraced direct economic controls of the type that became familiar during World War II has appalled and discouraged both Europeans and Americans who have been fighting to get Europe out from under the restrictions of such controls for the past five years . . .
>
> They cannot afford to get rearmament by giving up economic progress, as though in a few years time we could pick up where we left off and forget about defense as we did in 1945. To admit, or even to give plausible basis for arguments, that

the West cannot over a long period both defend itself and provide a better life for its people is to commit the one absolutely fatal blunder in the struggle with Communism. Were this view to become widespread in the West, there would be no remedy.

One need not in the least underrate ethical, religious, and intellectual factors. But no serious modern man is likely to doubt that a system which cannot both defend and feed and clothe its people will not survive long in competition with one that can.

In addition I would like to cite an enlightened comment from a Socialist Earl, better known as the highly controversial philosopher Bertrand Russell.

Many people, under the influence of fear, are inclined to relapse into some form of superstition, or to advocate on our side the very same detestable regimentation which leads us to condemn totalitarian regimes, not perceiving that this is to suffer moral defeat before the contest has begun . . .

What is needed above all is courage. In many situations which occur in many countries at the present time, physical courage of the very highest order is required. But for those of us who are more fortunate, courage is still required—moral and mental courage. We must face the dangers that confront mankind, and we must not let ourselves imagine that there are easy or simple solutions.

Many will help. But no one else can do your share to save the world from Communism, rescue it from Socialism, and make sure that the Land of Opportunity, which America's sons are fighting to preserve, turns the present danger into the greatest opportunity free men have ever known.

Gentlemen, it is up to you!

PRESENTATION OF DISTINGUISHED ACCOUNTANTS TO THE ACCOUNTING HALL OF FAME

By SAMUEL J. BROAD
Chairman of the Nominating Board for the Ohio State University Accounting Hall of Fame

Before proceeding with the formal part of the program, I think I should first say a few words about the origin, the organization, and the procedures adopted for the Accounting Hall of Fame.

The Ohio State University, on the initiative of its Department of Accounting, came to the conclusion that recognition could well be given to the growing importance of the art of accounting in America during the past 50 or 75 years by the creation of an "Accounting Hall of Fame" through which honor could be done those living or deceased persons who have made outstanding contributions in that field.

With this objective a Board of Nominations was appointed, consisting of fifteen educators, fifteen public accountants, and fifteen industrial and governmental accountants. A list of the members of the Board is contained in the program in your hands. The accounting educators have been prominent in the literary and educational phases of their chosen profession, and 12 of the 15 have been president of the American Accounting Association. The public accountants are men who have been active in practice and in professional circles, and nine of the fifteen have served as president of the American Institute of Accountants. The industrial and governmental accountants have equally made their marks in their respective fields; ten of them have been president of some organization whose principal activity is in the field of accounting. It is indeed an honor to have been chosen as Chairman of such a group.

As to the process of nomination in this second year of the Accounting Hall of Fame, each member of the Board of Nominations was asked to nominate five deceased accountants. Criteria which are to be taken into account include:

1. Contribution to accounting literature
2. Public speaking before professional and other groups
3. Service to accounting organizations of a professional character
4. Recognition as an authority in a particular field
5. Public service

The names of the ten who received the highest votes in the initial

nomination, with some weighing for the order of preference, were submitted in a second ballot; this second ballot resulted in the nomination of the two whom it is our privilege to honor tonight.

The University and the Board of Nominations are both highly conscious of the fact that the prestige which goes with election to the Accounting Hall of Fame, and indeed the prestige of the Hall of Fame itself, are and will continue to be, dependent upon the selectivity with which the nominating procedure is carried through. The caliber itself of those who have been selected thus far, I believe, gives an indication of the great care which is exercised. I feel sure that, knowing the standing of those nominated, you will concur in this view.

Representatives of the organizations with which the two deceased members of the accounting profession whom we are to honor tonight were associated have been asked to be present to accept the awards on behalf of their distinguished predecessors.

Professor Perry Mason, Dean of the School of of Business Administration of the University of California, Berkeley, is here to receive the award to Henry Rand Hatfield.

Mr. Weston Rankin, Partner of Price, Waterhouse & Co. from St. Louis is here to receive the award to Arthur Lowes Dickinson.

Mr. President: The Board of Nominations of the Ohio State University Accounting Hall of Fame presents the name of Henry Rand Hatfield.

Born in Illinois in 1866, Professor Hatfield graduated from Northwestern University and in 1897 received the degree of Ph.D. at the University of Chicago. He first taught at Washington University, St. Louis, and in 1898 joined the newly established College of Commerce and Administration at the University of Chicago. From 1904 until his death in 1945, he was associated with the University of California rising to the position of Dean of Faculties, the principal administrative office under the President of the University.

As a teacher he emphasized sound fundamental training and broad, rather than highly specialized, instruction. Though insistence upon intellectual discipline was one of his characteristics, his friends and associates remember him as a shrewd, witty and affectionate person. The breadth of his interests, which included the classics and the early history of accounting, enabled him to help many people in many ways, but his permanent reputation will rest upon his contribution to accounting.

Professor Hatfield at one time or another was President of the American Association of University Instructors in Accounting (later to become

the American Accounting Association), Vice President of the American Economic Association, and delegate of the United States Government to the International Congress on Commercial Education. He assisted in the reorganization of the California State Board of Accountancy in its early years, and in the formation of the California State Society of Certified Public Accountants.

During World War I Professor Hatfield served as Director of the Division of Planning and Statistics of the War Industries Board and thereafter as an expert on the Advisory Tax Board dealing with the formulation of government tax policy.

As an author Professor Hatfield had to his credit a long succession of reviews and articles containing selective, constructive, and critical discussion of accounting principles. His clarity of thought, his concise and vigorous style, and his recurrent tinge of humor, enlarged the impact of his ideas upon the development of accounting in its early years. His major work was "Modern Accounting." First published in 1908, this was repeatedly reprinted, and in 1927 was rewritten under the title "Accounting, Its Principles and Problems." When it first appeared, this work shone like a bright light against a dull background, little accounting literature of note having appeared for some years.

In conferring the LL.D. degree upon him in 1940, President Sproul of the University of California referred to Professor Hatfield as having been a "constant champion of the logical approach, the sane view, and the clear disclosure of the essential facts of goods and proprietorship; discoverer of scientific principles and sound philosophy in a field obscured by dogma and convention; one able to find life and even humor in the dust of ledgers."

As an inspiring teacher, as a gifted author, and as one whose keen insight and independent thinking were a potent influence in the early development of accounting theory, the Board of Nominations is privileged to present for the Ohio State University Accounting Hall of Fame the name of Henry Rand Hatfield.

PRESIDENT BEVIS: Professor Mason: In recognition of the outstanding contributions to the development of the accounting profession by Henry Rand Hatfield, upon the recommendation of the Board of Nominations and under the authority of the University, I have the honor to inform you that the name of Henry Rand Hatfield has been placed in the Ohio State University Accounting Hall of Fame. In testimony thereof, I present this appropriate certificate, duly signed and with the official seal of the University, which is now presented to you, as a representative of the University of California, where Dean Hatfield served during his distinguished career.

PROFESSOR MASON: It is a real privilege to accept the Accounting Hall of Fame award to Henry Rand Hatfield on behalf of the University of California. His former friends and colleagues at California are highly gratified that he has been given this honor and recognition.

My own acquaintance with Professor Hatfield dates from 1929 and for a number of years after his retirement we shared a study at the University. It was a stimulating experience, but one always had to keep his guard up with Hatfield, since he had a passion for precise thinking and precise expression, and was a master of witty and effective satire.

In spite of his reputation as a critic, he was a person of great kindness and he will long be remembered with affection by a host of former students and colleagues. I am proud to have been one of his friends in later life, and nothing has ever given me greater pleasure than the opportunity of accepting this Accounting Hall of Fame Award.

CHAIRMAN BROAD: Mr. President: The Board of Nominations of the Ohio State University Accounting Hall of Fame presents the name of Arthur Lowes Dickinson.

Born in England in 1859 and trained there as a chartered accountant, Arthur Lowes Dickinson came to New York in 1901 as head of the firm of Price, Waterhouse & Co. He brought to his task much more than a theoretical and practical training in accounting; he brought a broad intellectual background, a rugged integrity, an eager desire to advance the profession, and a personality that commanded respect and inspired those with whom he worked.

The time was opportune; recognition of the value of accounting was growing rapidly and new procedures were being developed. One of his first contributions was to the formulation of the annual accounts of the United States Steel Corporation, which were recognized as a milestone in the advance of adequate corporate reporting. Out of this association grew later an invitation to join with W. J. Filbert of that Corporation in suggesting regulations that would make the first Corporation Income Tax Law of 1909 workable.

Among his important engagements were the investigations of two great American insurance companies following the Hughes Report of 1905 and a study of the methods of the United States Post Office in 1907.

Always participating in professional activities, he took a prominent part in the work of the American Association of Accountants (predecessor of the American Institute of Accountants) and in the organization of the first International Congress of Accountants in 1904. He acted as secretary and also wrote an important paper, the first of a notable series which eventually became his "Accounting Practice and Procedure" pub-

lished in 1913. His writings were always lucid and direct and bore the imprint of a wide experience.

Not the least of Mr. Dickinson's services was his inspiration to younger men. Some of the prominent elder statesmen of the profession today owe much to his example and his encouragement.

Arthur Lowes Dickinson occupies a unique position in that, having rendered notable service to the young and growing profession in America as a result of training and practice in England, he later made a great contribution to English accounting as a fruit of his American experience. For services to the British nation in the First World War he was knighted by King George V in 1919. He retained his contact with America and American accounting until his death in 1935.

As one of the outstanding practitioners of public accounting in its early days, as one who had the vision to see the important part which accounting could play in the development of the economy, as a talented leader and an imaginative thinker in his field, the Board of Nominations takes pleasure in presenting for the Ohio State University Accounting Hall of Fame the name of Arthur Lowes Dickinson.

PRESIDENT BEVIS: Mr. Rankin: In recognition of the outstanding contributions to the development of the accounting profession by Arthur Lowes Dickinson, upon the recommendation of the Board of Nominations and under the authority of the University, I have the honor to inform you that the name of Arthur Lowes Dickinson has been placed in the Ohio State University Accounting Hall of Fame. In testimony thereof, I present this appropriate certificate, duly signed and with the official seal of the University, which is now presented to you as a representative of the firm Price, Waterhouse & Company, with which Mr. Dickinson was actively associated during his distinguished career.

MR. RANKIN: It is a great honor and privilege for me to accept this citation of Sir Arthur Lowes Dickinson. As a partner of the firm which he headed so farsightedly in the early years of this century, I can bear grateful testimony to the influence he has had upon the development of the accounting profession in this country and of my firm.

The citation speaks of his influence on younger men. Some of you many recall that in his acceptance of the same honor last year, Mr. George May spoke of the inspiration that both he and Robert Montgomery had drawn from Mr. Dickinson. It was a great disappointment to Mr. May that his doctor would not allow him to be here tonight as he had planned. He has asked me to express to the Nominating Board his personal appreciation of the honor done to his great friend and mentor, an appreciation that is shared by every member of my firm.

FIFTH SESSION

SATURDAY, MAY 19, 1951—10:00 A.M.
Junior Ballroom

Address: "Controlling Overhead Expenses"

GOULD L. HARRIS, *President, Grand Council of Beta Alpha Psi; Professor of Accounting, New York University, New York, New York*

Address: "Developing a Program for Effective Internal Control"

VICTOR Z. BRINK, *Ford Motor Company, Dearborn, Michigan*

CONTROLLING OVERHEAD EXPENSES

By GOULD L. HARRIS
New York University, New York City, New York

Classes of Control Conditions. Control of overhead is attempted under several classes of conditions:

1. Where standard factory overhead rates are used but no system of flexible or variable budgets for expense control. These rates are current and attainable in some shops, being revised when practical; in other shops at the present time these rates have not been currently revised.

2. Where standard overhead rates are used, and in conjunction with sets of flexible or variable budgets prepared in *advance* for a range of practical operations at class intervals of 5 per cent or 10 per cent, and resort is made to the method of interpolation when actual activity is not coincidental with a pre-calculated activity.

3. Where standard overhead rates are used and the *formula method* is followed in computing current budgetary allowances, thus avoiding the device of interpolation and a lot of advance calculation as under method two.

4. Where fixed costs are treated as *period costs* and are not charged to inventories; therefore, the factory overhead rates include *only variable overhead.*

Many accountants do not make adequate use of the accounting and allied tools at their disposal. This is evident in many shops where overhead is merely *distributed.* It is not *controlled* despite the fact that it is often the dominant element from the standpoint of magnitude. It is not controlled because of the lack of standards and budgets.

The psychological strength of definite goals or bogies in a system of standard costs and budgets is immense. From their use, industrial policy and practice can be redeemed from hunches and guesswork, and placed on a solid foundation of reasonable reality.

John Dewey once wrote: "Men don't shoot because targets exist, but they set up targets in order that shooting may be more effective."

Ralph E. Case long ago observed that a Cost and Variance statement "is the equivalent for the section, to what the Profit and Loss Statement is for the company as a whole."

Overhead Control a Portion of Profit Control. Controlling overhead expenses is not an isolated problem in a vacuum. It is but a portion, albeit a highly important portion, of the larger managerial problem of profit planning and control. If effective, the control necessitates unremitting rather than sporadic effort. The various levels of organizational

authority and responsibility must keep everlastingly on the job with respect to overhead reduction. Alertness and imagination are prime requisites in control.

Overhead control should not be viewed merely from the worm's eye view of the technicians but also from the bird's eye view of the top executives.

Cost accounting for overhead which deserves to be called effective, provides for dynamic cost control. It must be something more than the mere writing of historical costs. There must be sound objectives based on sound organization. Performance must be measured by attainable standards, and flexible and variable budgets. Thus deviations or variances result. These are analyzed as to casual factors for remedial action where possible, not only intermittently for dramatic cases, but persistently and consistently. Teamwork must be insured, vertically and horizontally. Loyalty should flow not only from the bottom upwards but also from top to bottom and laterally at the various organizational levels. Effective control data must be provided, couched ultimately in terms of the Master Profit Plan for each time period.

Control of overhead must be anticipated and planned. To wait until overhead is a *fait accompli* is not sufficient. Many factors today well known to all of you complicate the problem of executives.

Some Cost Classes. Basic to the control of overhead is a chart (code or classification) of accounts so constructed as to reveal the major categories of overhead, namely, fixed, variable, and mixed.

Erratic or irregular costs also occur.

Even today many managers have improperly assumed that more of the overhead is fixed than is the case, and believe that it cannot be controlled, and have not regarded as variable enough of the overhead. Too often the pernicious feeling has prevailed that neither class is subject to adequate control.

Some classify costs into four groups:

1. Wholly or purely variable costs.
2. Wholly or purely fixed (constant) costs
3. Mixed costs.
4. Special expenses.

The latter are items which apparently have no direct relation to volume, and yet reveal wide fluctuations from period to period. These accounts are analyzed individually and then classified as either fixed, variable, or mixed. One example of a special expense account is the Bottle and Case loss account in the bottled carbonated beverage industry. Such a loss increases with and declines with volume, but there is a substantial time *lag*. Moreover, large purchases of such items are often written down

to deposit value in one month. These classes of factors make the amounts in this account seem to be non-variable but over a long period they are not, and the account is secondarily classed as variable.

Advertising in this industry is treated as fixed after first being classed as special.

Fuel is an example of a special account which is later treated as mixed. The part of fuel used in manufacturing is classed as variable. Since the part used for heating of buildings obviously varies with the outside temperature, it is considered fixed becaues it will average out for the year, and is unaffected by the volume of production and sales.

Some treat special expenses as a fourth class and as an integral group. They consider that they reflect seasonal trends, *e.g.*, the coal account.

Harry E. Howell (NACA Bulletin, November 15, 1946) divides costs into these groups:

1. Fixed	3. Semi-variable at varying levels.
2. Constant	4. Variable

The practical value of classifying costs according to their behavior in relation to volume changes, becomes apparent when systems of standard costs, and flexible budgets are installed and operated. Such systems impel an intensive study of cost patterns. In doing so, it is soon recognized that many accounting systems are defective in their classification (chart, code) of accounts.

Where account labels often unintentionally deceive, as far as the architects and users of the accounting system are concerned, it is imperative that a re-analysis and a re-grouping be made of *bulked or merged costs* in account structures. Only by such a revamping can there be constructed a serviceable system of standard costs and flexible budgets for control.

Measurement of Overhead. Measurement precedes control. The fixed overheads when measured can be graphed as horizontal lines since they do not vary with changes in volume for a practical range of operations. The variable overheads can be charted as diagonal lines which increase directly as volume increases. The mixed overheads display various patterns of behavior. Some items such as Supervision take the form of a series of plateaus or a step chart. Some resemble a portion of the letter S. The determination of a current allowance budget for some mixed overhead items is illustrated somewhat by Figure 1, page 115. The example chosen is indirect labor other than supervision. On the base line, abscissa, or X axis is plotted percentage rates of activity for a practical range of operations. For example, from 0 to 140 per cent of normal activity (100 per

cent) at 20 per cent or less intervals. This activity is in terms of some common denominator. Here standard direct-labor hours are used. Sometimes 1,000 standard minutes (M.S.M.) are used.

Dollars are plotted on the left ordinate of Y axis, ranging, in the example, from 0 to $750 at intervals of $100.

These horizontal line and vertical line are reference lines.

A vertical line is drawn at the point of normal activity (100 per cent) which in terms of the common denominator selected for a given department in the illustration is 1,600 *standard* direct-labor hours. A scatter diagram or chart is prepared.[1] Basic figures for 36 past months or 18 past months, or whatever period is regarded as enough to be indicative of trend are used. These are the standard direct-labor hours for the base scale, and dollars of indirect labor for the horizontal scale.

For the first month selected a dot is placed in the chart field on the activity vertical opposite what the indirect labor (from the pay roll sheet) was for this quantity of standard direct-labor hours. The process is repeated for the other months of the sample. A trend line is then fitted to the data. This line will cross the normal activity vertical at the point opposite what is thus measured as the normal budget of dollars for indirect labor. The latter in the illustration is $750. The trend line will not reach the Y axis because of the variable portion of the indirect labor, unless activity of the center line has fallen to zero in some month or months of the period studied. Hence the trend line is projected (extrapolated) downwards and to the left until it cut the Y axis. This point when read off from zero is the *fixed* component of indirect labor. In the example it is $200. A horizontal line is drawn at this point. The vertical distance between this line and the trend line at any per cent of normal activity represents the variable component of indirect labor. At normal activity it is $550 ($750-$200).

The formula for the flexible budget in this case can then be derived. It is:

Fixed, $200 + (Variable, Current Activity %X $550) or
Fixed, $200 + (Currently activity in units X $550

1,680 units)

In drawing the trend line and in the computation of the formula, experience data are not necessarily relied on to the exclusion of estimated

[1] To simplify reproduction, dots are not shown in Figure 1. For an example of a complete Scatter Chart see page 528 of Cost Accounting by Reitell and Harris, International Textbook Company, Scranton, Pennsylvania, 1948 edition.

and foreseeable conditions. Examples of the latter are prospective changes in direct labor rates (new union contracts may have been signed or rates agreed upon); changes in the number of indirect labor personnel; changes in normal activity growing out of changes in consumer demand, new products, etc., and other casual factors.

Someone has made the statement that a trend line for a mixed cost can be fitted by one of three methods:

1. Inspection or eye-test.
2. Semi-averages.
3. Least squares.

But the method of semi-averages in reality is simply an aid to fitting a curve by the inspection method, and hence should not be classed as a separate method. In the use of semi-averages the data to be used are divided into two equal segments or parts. A separate arithmetic mean of each of the two halves of data is computed and placed in the chart field. The line of fit is then drawn through these two plotting positions. (See Chaddock's Principles and Methods of Statistics, p. 321, for an illustration of the techniques of semi-averages.)

It is the contention of some that the method of least squares is superior to the method of inspection in fitting a trend line to basic data. But others believe that in some cases the former method is not justified in view of the longer time required and any increased improvement in fit. Have you ever tried to explain the method of least squares to a supervisor? It is not an easy task.

The most important feature in getting a line of best fit no matter what type of curve is being plotted is the *factor of judgment.* The detail work in using the method of least squares can be assigned to clerks. But a clerk may not have the requisite judgment to fit well a line to underlying data.

Departmentalization. Overhead is departmentalized for control purposes. The most common classification of departments or cost centers for the manufacturing function is, of course, (1) direct, operating or producing and (2) indirect or service. In the Uniform Accounting Manual for the Electrical Manufacturing Industry (N.E.M.A.), a third classification is mentioned, namely, Nominal Cost Centers. These consist of "bookkeeping rather than physical subdivisions." An example in Space Occupancy for the purpose of "accumulating all expenses related to the operation and maintenance of buildings, repairs, etc. The total of Space Occupancy Costs may then be distributed to other cost centers on the basis of floor space occupied." Other names for these nominal cost centers are clearing accounts, and cost pools. In the Accounting Manual of the Ma-

chinery and Allied Products Institute (M.A.P.I.) Space Occupancy is termed Building Expense.

The best way for portraying the scope, area covered, and location of the different cost centers is by a pictorial display of isometric paper. Such charts show vertical, horizontal and cross lines which facilitate visualization of plant layouts. They are of service in setting standard costs and budgets.

The problem of controlling overhead is such a large and diverse one that only a few aspects under the control conditions stated earlier can be mentioned because of the time alloted for this talk.

Control Condition One

In some companies where a sales price freeze exists, the standard costs have not been revised upward on account of the attitude that they would be unattainable as far as current performance is concerned, and flexible budgets have been dropped because of a feeling that they cost too much.

Another general reason given for non-revision of standards in some plants is that the revision is too expensive. For example, engineers are devoting a large amount of their time to government contracts and would begrudge the spending of any portion of their time in revamping standards. One reason for changing standards is for internal control in departments. But many shop persons are content with existing standards. They are satisfied with controlling hours, believing that they can adequately explain the Variance accounts relevant to salaries and wages which have greatly increased even though not reflected in higher standard costs. Of course the control of hours (time) is important at any stage of the business cycle.

At present, costs are inflated. This has caused some companies to avoid increasing their burden rates to provide complete burden absorption. The propriety of this practice can be questioned. But some condone this practice on the ground that costs are distorted by reason of inflated valuations.

The ratio of indirect (or expense) employees to direct employees is carefully watched or should be in addition to a comparison of actual dollars with budgeted dollars under all four types of control conditions. Conclusions drawn may be erroneous, however, if labor which is indirect is classed as direct. The above ratio is watched even in companies which enjoy the differential advantage of being a monopoly or quasi-monopoly even though more consideration is paid to the ratio when the meat on the hog is lean.

A typical year is selected in establishing the ratio of indirect to direct workers. Changes in incentive wages by departments due to product assortment are reflected as a variance, and studied. So also are the variances

due to a change in method of manufacture even though in these two cases the standards may not have been revised.

Control Condition Two

Case of Control Where Only Standard Overhead Rates are Used and Non-Formula Flexible Budgets. In some plants an additional factor has been introduced for measuring the *relative effectiveness* of the works overhead on a factory-wide basis for *each plant* in the corporation family. Formerly, in one corporation the measure was direct man-hours or some other common denominator. In budgeting there was allowed direct variations of those expenses that occur directly in proportion to output; and also a portion of mixed (semi-variable) expenses was allowed—both on the basis of direct man-hours.

Each works manager considered this method *unrealistic* especially where additional productive machine-tool equipment was acquired, and operating methods were improved. Each objected to direct man-hours as an adequate measure because under the two foregoing conditions there was a tendency for direct hours to decline for a given volume of physical output. Therefore, it was decided to measure output in relation to *billing dollars produced* since the physical output was of such a *varied nature* that for *budgetary purposes* its volume could not be measured by the number of pieces produced.

The *billings produced per direct man-hour* are computed for each plant. The calculation is accomplished as follows. The actual production if billings for the month represents the *actual billings to* customers plus the valuation represented by an *increase in manufactured inventories* (in process, in parts stock, and finished stock) or *minus* the valuation of billings represented by any *decrease* in manufactured inventories in that period. The *resultant billings* are then divided by the direct-man hours worked to show the billings produced per direct-man hour. In the illustration below, the figure is $25.

The overhead or expense cost per billing *dollar* is also computed by diving the total factory overhead for the plant by the billings produced for the month. In the illustration it is $0.17.

Illustration	*Actual*
1. Direct hours worked	129,000
2. % of operating capacity (normal activity) worked	98%
3. Billings produced per direct man-hour	$ 25.00
4. Expense cost per billing dollar	$ 0.17
5. Factory overhead (listed by detailed accounts)	$545,000

The point to stress is that the foregoing procedure measures overhead by *dollars of billings produced,* and thus indicates to top management as well as to the works management in each plant the result of the control of the cost elements of the billing dollar. It should be emphasized that the type of calculations illustrated is made only for the *summary* of *total plant overhead.* For each operating department in each plant the direct labor-hour worked continues to be used as a measure of activity (capacity) and control.

The placing of responsibility for control is always important. Here is a case. Normal shop cost ratios for each line of product are determined. Thus the *weighted* average normal shop ratio for the mix of products as based on the *billing quota* might be $0.720. The budget for any single month, however, is based on the *actual volume* of *each type of product* billed for the month. As a result, the weighted average budgeted normal shop cost for actual billings for the month might be above or below the weighted average or $0.720, say $0.690 or $0.750. The reason for this variation in overall budgeted cost lies, of course, in the relative volumes of the more profitable or less profitable products billed during the month. In short, the casual factor is a deviation in actual sales mix from the budgeted sales mix. Emphasis of product lines on monthly operating reports can make both sales management and works management more profit conscious—and often surprisingly so.

It is unfair to hold the works manager responsible for a drop of several percentage points in his profit for any month until the cause is first determined. It might be due to a disproportionate sales volume of lower profit products. This is the responsibility of the sales department (barring other casual factors) rather than the manufacturing department, provided the latter has at least met its planned product cost and overhead allowances.

Control Condition Three

Master Budgets for Cost Centers. In advance of each fiscal year a Master Budget sheet is prepared for each cost center. The figures are reduced to a monthly basis. Figure 2, page 116, is an example of such a sheet for an *operating department,* the *normal activity* of which is 7500 units. The behavioristic patterns in relation to changes in volume are designed as V for the wholly variable costs; F for the wholly fixed costs; and M for mixed (semi-variable) costs. The mixed costs, of course, have a fixed and a variable component. The formulas for budgeting these

costs are determined in the manner previously outlined and are indicated on the master sheets. For example, the budget for power cost at *normal activity* is $2,150. Of this amount $150 is the fixed component, and $2,000 ($2,150-$150) is the variable component. The latter could be expressed as so much per unit, *i.e.*, in terms of the common denominator for normal activity in the center. For the power item in this case it would be $0.2666 + per unit ($2,000 ÷ 7,500 units).

The standard cost per unit for recovery to inventory is computed. In Figure 2, it is $3.20 ($23,995 ÷ 7,500 units). A similar type of sheet is prepared for each of the other productive cost centers. A Master Budget is also prepared for each service cost center including one for General Plant Expense or General Factory Overhead, or whatever termed.

Figure 3, page 117, is an example of a Cost and Variance Statement of the unit analysis type for an operating department. It shows the name and code number of the department; the names and code numbers of each item in the breakdown for the department; actual current costs; the budget allowances for current activity for each item in the breakdown; any extra budget allowance; the cost period variances; the variances for the cumulative period (year to date *i.e.*, Y.T.D.).

The procedure for determining the current allowance for a single item of each of the three categories of costs is here outlined . *Operating Supplies* is regarded as a wholly variable cost. In Figure 2 on the Master Budget Sheet, the budget for this item at normal activity of 7,500 units is $120. Current activity is 9,000 units. Hence the current activity level or ratio is 120 per cent (9,000 units ÷ 7,500 units.) The budget allowance for this activity, therefore, is 120 per cent X or $120 or $144. This is inserted on the current statement. It is matched with the actual cost of the item as recorded for the period, $142; and the period variance of $2 is calculated. It is a good, plus or favorable variance. Year to date variances are similarly computed.

Depreciation under the straight line method is budgeted as a wholly fixed cost. Consequently, the amount of it on the Master Budget Sheet for normal activity ($575) is treated as the allowance for current activity. This item reveals no variance.[2] If depreciation were recorded in consonance with production volume or service hours, it would be budgeted as a wholly variable cost.

The current allowance for power, as an example of a mixed cost is computed as follows:

[2] There can be variances in connection with fixed costs.

Fixed portion		$ 150
Variable portion:		
Variable at normal activity	$2,000	
X Current activity ratio	120%	
Variable portion at current activity		$2,400
Total current allowance		$2,550

The variable component could also be calculated by multiplying the unit variable cost of power, $0.2666 ($2,000 ÷ 7,500 units) by the current units of 9,000.

No matter how equitable current allowances may be from the standpoint of the foreman (keyman or supervisor) and other personnel in the cost center whose effectiveness is to be gauged by the degree of deciation from these allowances, conditions often arise in a current period which justify the granting of extra allowances. They will be granted if top management is imbued with a judicial spirit.

By referring to the Cost and Variance Statement (Figure 3, page 117), it will be noted that the standard cost recovered (charged) to inventory is dtermined as follows. Current activity (9,000 units) is multiplied by the predetermined cost per unit ($3.20). The result designted as "A" is $28,000. The total actual cost (B) is $27,137. The total current allowance (C) is $27,484. The total variance is the difference between the cleared in cost and the actual cost, *i.e.*, A - B or $28,000 - $27,137 or $1,663. This is often termed under- or over-absorbed burden. It is over-absorbed burden or a good variance in the illustration. The volume variance under one method is $1,316, calculated as follows:

A—Recovery to inventory	$28,800
C—Current budget allowance	27,484
Volume Variance (Good)	+$ 1,316

It is a good variance because current activity, 9,000 units, is greater than normal activity, 7,500 units; and because the fixed costs do not rise even when actual volume is greater than normal—do not rise within the budgeted range of practical operations. This assumption is valid for the matter under discussion.

The performance of controllable variance is the difference between the current budget (C or $27,484) and the actual cost (B or $27,137). It is $347. This variance *in toto* is a good variance. The variance statement shows the breakdown of this, item by item, so that supervisors can tell which items show god variances and which items bad variances in

order that the costs may be controlled at their *source*, or point of origin, *to the extent that they are controllable.*

As early as 1920 the late J. P. Jordan and myself in our Cost Accounting Book (page 110) stressed the importance of *accounting at the source* not simply from the standpoint of accounting mechanics but from the more important standpoint of *control of costs.*

Some object to the advance preparation of a long series of flexible budgets (as in Control Condition Two) on the ground of unnecessary clerical detail. Others contend that as volume declines the foremen are more inclined to reduce costs if they possess advance information of what the costs should be at the lower levels of operations.

The advocates of the formula method (Control Condition Three) believe that it saves clerical work in comparison with the previous method; that the foremen can currently apply the formula method, and hence that no feature of proper control is handicapped by these later computations.

Some Examples of Overhead Control

Control of Supplies. Before considering Control Condition Four, some specific examples of overhead control will be outlined.

It used to be rather common to set *loose* standard at the outset of overhead control, and to tighten them later in the light of better performance. Today because of the attitude of some union leaders this evolutionary process would not result. Consequently, initial standards are much tighter than formerly. Now and then, however, a *voluntary* instance of tightening standards, as suggested by supervisors, occurs as in the following case. It is in the area of supplies control. The general superintendent in a chemical plant became very vocal about the excessive cost of "fugitive" materials, so-termed, *i.e.* miscellaneous supplies. These consisted of such items as glass funnels, rubber gloves, and ordinary items, namely, brooms, monkey wrenches, screw drivers and others.

For a certain period the requisitions for the quantity of these supplies, the usefulness of which had ended, were collected, and the physical items of supplies were placed in separate piles to dramatize their magnitudes.

The relation between the total supplies consumed and the standard productive number of minutes on a departmental basis for each of three months was computed. (The Bedeaux incentive wage scheme was in use in the plant.) The supervisors did not feel that the past consumption was a fair criterion for the setting of standards for the foregoing supply items. As a result, the standards were voluntarily set by the departmental super-

visors as half of the difference between the consumption of the lowest of the three months studied and the average of the three months, as related to standard productive minutes. Each supervisor was given a little book somewhat similar to a bank pass book. Each was periodically credited for the supplies his cost center should have consumed on the basis of the standard minutes allowed for its current production. Against these "deposits," so to speak, supply withdrawals were charged. The objective of real savings was accomplished, and the supervisors from time to time proudly announce the amount of their "monies" in the "bank." It it not to be inferred that such a procedure is here suggested for setting supply standards in other plants.

Where local and quick delivery of supplies can be made to consuming plants a modern development in some companies is to immediately expense supply purchases and not to capitalize them even temporarily in inventories. This means also that the seller takes over the storage function, and that less money is tied up in supply inventories than would otherwise be the case. Another method is to charge supplies to consuming cost center on the basis of past *ratios* of consumption. This eliminates perpetual inventory recording.

Reduction in Shipping Expenses. Here is an amusing but imaginative example of overhead reduction. In one shop which has a keyman bonus plan, one product is electrical transformers. These were shipped in boxes to power sub-stations. Such containers constituted the largest item of shipping department expenses. The standards for this department had been well set and were attainable. For a long time the foreman of this department had not been able to effect much saving. Suddenly the savings became surprisingly large. Investigation revealed that he had ceased to put the transformers in boxes. Instead he had strapped them down on flat cars. Such a method of shipment did not damage the product which at its destination was located in the open in sub-station power houses. The foreman in this case received an additional $4,000 as a result of his ingenuity. The standards for the current year were not changed but were revised before the next began.

Reduction in Slow-moving and Obsolete Equipment. One company by a simple means has materially reduced its slow-moving and obsolete inventory. A long table was set up in the plant gallery. On it was laid out only *one* piece of each kind of slow-moving equipment (product) with a red tag attached to each single type piece, marked with the total number of pieces of this item in stock. Engineers and foremen *et al* periodically examine this stock to see if they can economically use it in production, as it is, or with slight changes. When the quantity of a particular item tagged

red is all consumed, except one unit, a white tag is attached to that unit item on the table until it also is used. Then other obsolete items are placed on the table, and a new cycle of examination and use is started. This visual method has proved much more effective in reducing the net cost of slow moving and obsolete items than the former and more conventional method of simply preparing lists of slow moving and obsolete stock for examination and disposal.

Repairs and Maintenance. One of the most difficult problems in budgetary and cost control is to find a discernible pattern in the behavior of Repairs and Maintenance Expenses.

While repairs and maintenance are usually coupled together, they constitute two essentially different functions. The purpose of Maintenance is to prevent a breakdown of function by preserving a continuity of operations. The purpose of Repairs is to correct a breakdown, or to attempt such correction.

When a study of the behavioristic character of Repairs and Maintenance expenses is initially undertaken, it is often discovered that the existing classes of expenditures, and the source reporting thereof, are deficient. Hence revisions must be made. This is necessary even in a plant which makes a single product (such as a paper mill), and becomes increasingly important where products are diversified. Segregation is a preliminary to correct analysis. Often, maintenance supplies and maintenance labor are indiscriminately merged. Consequently, existing records of Repairs and Maintenance are often unreliable for close budgeting. Pending the accumulation of reliable experience data, estimates of foremen and the Mechanical Department are used in budgeting.

Frequently, the Repairs and Maintenance Budget is based upon a moving average for a preceding period of 3 to 5 years or more. Such an average, however, is modified by competent engineering inspection of the fixed assets subject to repairs and maintenance. This budget is not necessarily adhered to rigidly in a current period if the urgency of repairs and maintenance is evident.

Some repairs and maintenance, somewhat *fixed* in character, such as repairs to buildings, fences, sprinkler systems, *et cetera*, may be deferred for considerable periods without harmful effects to the value and usefulness of such fixed assets. This is done in periods of war and prosperity because of the pressure for production at almost any cost.

Sometimes a Reserve for Repairs and Maintenance is used to spread such charges.

Some companies make most of their repairs, especially those of a

major character in a few weeks or a couple of months. If the annual budget in this case is divided by 12, the Controllable or Performance Variance is improved in some of these periods.

Repairs made to excess and unused equipment should be separated from repairs to equipment in use.

An effective Machine Shop will keep an adequate record of repairs and maintenance for each machine—by vendor, by make, and by age of machine. Candor compels the admission, however, that the budgeting of these costs is fraught with considerable guesswork. These costs often follow an irregular and erratic pattern of cost behavior. Several factors affect their magnitude.

1. The physical condition of the properties at the beginning of the fiscal year.
2. The prospective utilization of properties.
3. The prospective costs of maintenance, materials, and labor.
4. The managerial policy.
5. The status of deferred maintenance.

Control of repairs and maintenance should start *before* and not solely after they occur. Two basic problems are present. One is long-term in character, the other is short term. Under the former, standard burden rates are set for charging products. This requires the accumulation of repairs and maintenance expenses for a period long enough to cover at least one complete cycle of deterioration and replacement of the equipment involved. For the roof of a building this may be 7 to 10 years. Experience data as well as estimates for the future year are considered.

In order to control the short-period costs many companies employ a cost estimator, and hold the Maintenance Foreman responsible for keeping his expenses within these estimates. This requirement applies chiefly to large jobs. Standing expense orders are used to gather the costs for regular recurring work such as oiling, belt repairs, minor electrical repairs, *et cetera*.

Special problems, specialized treatments, and special observations with regard to repairs and maintenance occur. A few will be mentioned. Those who repair punch-press dies often make the assertion that the *number of set-ups* has more effect upon the life of dies than the number of pieces run off by the presses.

Many companies have what amounts to a fixed crew of maintenance workers. When they are not engaged in maintenance work, they fabricate the product with or without proper credit to Maintenance Expenses. If credit is not made, both maintenance and direct product costs are incorrect.

In one company, trucks used for internal transportation were originally equipped with iron wheels. Later rubber tires were substituted. The Superintendent of Maintenance was operating under a budget with a liberal bonus for meeting or bettering the budget. He protested the charge for the rubber tires to his budget. The consulting public accounting firm agreed to capitalizing the new tires after writing off the discarded iron wheels to "Improvement Expense" rather than to "Maintenance." This was consistent with the practice of treating similar expenses when enlarging the office, installing new lighting fixtures, rearranging the factory departments, and installing new locker rooms and toilets.

Standard practices to be observed at set times should be established for some maintenance. In other words, maintenance should be scheduled. Such a policy is *anticipative or preventive maintenance.* In one company, a schedule in chart form shows different colored dots for the places and times scheduled for daily, weekly, and monthly oiling of machinery and equipment. Adherence to such a schedule prolongs machine life. It is good life insurance, so to speak. The plant facilities are often largely responsible for budgeting difficulties.

The replacement of gradual deterioration may be deferred for some time, in order to conserve working capital in periods of depression, or to avoid loss of output in busy periods. In this respect, there is no marked difference among various industries, except that the manufacturers of consumer goods tend to "dress up" their plants more than the manufacturers of heavy goods. Companies in both of these types of industry "cut corners" when cash is scarce, and spend more freely when cash is plentiful.

Maintenance, overhauling, major repairs, additions, and improvements need to be differentiated before referring to their effective control.

Maintenance is necessary to keep the cost centers, the machinery and the buildings in a clean, orderly operating condition. Maintenance costs include items related to personnel such as cleaners and sweepers, oilers, watchmen, inspectors, carpenters, electricians, and other mechanics working on small jobs lasting no longer than a few hours, and safety expense. By their nature such expenditures are *preventive costs.* They are made not only to maintain first-class plant conditions but also to prevent breakdowns and the corresponding disruptions of operations. Thus maintenance costs exclude the large extraordinary outlays that characterize the major breakdowns and the large overhaulings that must be made from time to time.

Not all companies have separated the *maintenance* costs from those which may be termed overhauling or *major repairs.* The traditional mix-

ing of cost outlays makes impossible the establishment of *control standards*, and prevents savings in time and related expenses that are often of large magnitude.

Maintenance costs are regular, normal, ever-recurring charges for which budgets for normal activity and allowances for current activity are computed. This is done for each center on a monthly basis or even a shorter time period.

Overhauling costs cover the regular and usually seasonal tear down, cleaning, repairing, and improving activities. Some examples are overhauling the line of equipment including the painting, cleaning, and restoration to operation of equipmeent such as chemical mixers. Because such work is measurable, budgets and current allowances can be established for it.

In contrast to maintenance and overhauling costs, *major repairs* are made necessary because of a breakdown in the functioning of a machine, a line, or a building at an unforeseen time. A roof may fall in, a gear on a machine may break, or a filter may fail to perform. As a result, production is slowed or stopped. Major repairs such as these and others seldom, if ever, occur according to a time schedule. They come at unexpected times, interrupt regular operations, and cause serious delays throughout the plant. They stand out from the small running repairs classified under "maintenance and running repairs" in that no small adjustment or change of a small part or no small outlay for labor and supplies will remove the damage.

The major repairs are usually accompanied by down time, large expenditures for labor, and often also for materials. One company has arbitrarily defined a major repair as any breakdown which involves more than an hour's time, or an outlay of labor and material of more than $100 to get the equipment back into proper operating condition. Some other companies have standard instructions covering this matter.

Major repairs usually require the services of the Engineering department. It is empowered to issue major repair orders under a specific project number and in accordance with complete estimates of cost and of time for the repair of the malcondition. While it is difficult to set standards for major repairs, one practical method is to compute a "running average" on a monthly basis for at least 48 months. This is used in establishing the budgets for major repairs.

While *additions* and *improvements* are closely related to the foregoing classifications of maintenance, overhauling costs, and major repairs, they are capital charges and do not enter as overhead into the profit and

loss structure for the period. However, they do involve costs for labor, material, and supplies, and therefore should be a portion of a definite program of standard expenditure control.

In the case of costs for overhauling, major repairs, additions, and improvements, the accounting department records and reports expenditures through the use of specific project controls. A major project is often so large that many component projects are portions of it. All projects are carefully estimated in regard to the necessary time for their completion and expected cost outlays. A regular running report is kept to show how each project is progressing. It compares actual costs with estimates and also the actual time consumed with the predetermined time table.

Four types of forms serve as examples of control reports. They are: (1) Cleaning Schedule, (2) Machinery Maintenance Schedule, (3) Summary of Projects, and (4) Analysis of Component Projects.[3] The cleaning schedule is self-explanatory. The Machinery Maintenance Schedule provides for daily, weekly, monthly, and a quarterly attention to maintenance needs.

The "Component" sheet breaks each project down into its component parts and furnishes control data for each of these parts.

Very few companies, comparatively speaking, have scientifically attacked and solved one of the major problems of cost control, namely the problems of the four above categories. The use of forms like those mentioned redeems maintenance and repair charges from do-nothing, guesswork, and lack of workable control, and places them on a sound procedural foundation. The basis controls stem from these four forms. The controls are established by having the supervisor, the cost accountant, and budget man set up the number of man-hours needed for each maintenance and component project. To these hours are applied the standard labor rates. Standards are also set for material. The overhead is related to the labor hours budgeted, and becomes a part of the maintenance rate or repair rate per hour.

The setting of standards for and the control of maintenance, repairs, and projects including *preventive maintenance* constitute a major opportunity and challenge in overhead control.[4]

Profit to Volume Charts. Before considering Control Condition

[3] See *Cost Accounting* by Reitell and Harris, pages 547-551 for sample forms.

[4] The speaker is deeply indebted for many helpful suggestions and advice received over the years from R. Case, C. Reitell, C. C. James, and W. Wright of Stevenson, Jordan, and Harrison, Inc.; and from Frank Klein of The Worthington Pump and Machinery Corporation.

Four, attention is called to the most useful type of charts in Profit Planning and Control, *viz.*, Profit to Volume Chart (Figure 4, page 118).

This is prepared for company as a whole, and for each product. The latter takes the form of a "hip-roof" chart, so-called.

Prospective profits or losses can be readily determined from the chart and matched with actuals and deviations studied in the control of overhead and other costs, and in sales control.

The break-even point, of course, in most companies today is higher than 50 per cent. It was made low purposely in the illustration to simplify the calculations.

Another type of useful chart shows:

1. Budgeted Accumulated Profit on a weekly basis, for example, for 13 weeks or other time period.
2. Potential Accumulated Profit on Sales Booked for the same period.

The total fixed cost for a week is plotted as a horizontal. Anything above this is the weekly marginal income or revenue.[5]

Basic Cost Accounting—Control Condition Four

What It Is. Charging to inventories only variable costs such as direct materials, direct labor, and variable overhead and thus keeping out of inventories the fixed or constant overhead, and treating the latter as *period costs* has been termed the Direct Costing method (*N.A.C.A. Bulletin*, January 1951, article by Waldo W. Reikirk of the Dewey and Almy Chemical Company, Cambridge, Massachusetts.) His chief, Jonathan Harris, pioneered in this field.

The management engineering firm of Stevenson, Jordan and Harrison, Inc., for which I once worked, calls this Basic Cost Accounting. This name is not to be confused with Basic Standard Costs as advocated by Eric A. Camman and some others. (Refer to Figures 5 and 6, pages 119 and 120 before reading further.)

Cost accounting in its *control features* has suffered greatly from the concept and practice of normal burden rates, and the resultant exclusion of more relevant matters. Some of these will be alluded to. Those of you who have installed standard cost systems know that the determination of what is termed normal activity or normal capacity or whatever base is used in the setting of standard or predetermined rates is usually the most difficult problem of all you encounter, and often your decision in the matter is less satisfying than any other part of your work in system building.

[5] This will appear in "The Basis of the Flexible and the Variable Budget In An Expanding Economy" by the Society for Advancement of Management to be released July 7, 1951.

Some Advantages and Features of B.C.A. Basic cost accounting leads to better managerial control because among other things it has all the features of flexible budgets which are present under a system of conventional standard costs without its most disturbing factor, namely, volume variance.[6] This variance is entirely eliminated as an account. It is always a very difficult matter to explain in the training of a non-accounting executive. *Volume variance is eliminated* because inventories are charged with variable costs only. Thus, the *unit fixed costs* which actually vary with volume do not have to be explained in relation to recovery to inventory made at a constant rate as far as fixed cost is concerned. (Rate, of course, also includes the variable overheads.)

Moreover, each supervisor (department head) can see more clearly how his department or cost center fits (or ties) into the Master Profit Plan of his company. One reason for this is that the analysis of variances is not complicated by the existence of the fixed or constant costs in the inventory valuations, and the consequent emergence of a volume variance as already stated. Changes in costs and profits because of changes in inventory position are no longer a mystery to the executive not trained in accounting.

Because the relation between sales price and the variable cost of a product on a unit basis is constant for a considerable period, irrespective of volume and sales mix (product assortment), the difference between sales price and variable cost is more valuable for management in profit planning than the conventional gross profit.

In some installations of basic cost accounting, especially in small companies, the fixed and variable components of the mixed costs have not been segragated because the failure to do so has not cause serious distortions. Consequently in such cases a mixed cost is treated as entirely fixed if this component is the larger, or as entirely variable if that component is the larger. This non-segregation is not advisable in companies of any considerable magnitude.

The Treasury Department has approved the plan of basic cost accounting in some plants, and has not questioned it in some others. It has objected in other cases. Consistency in inventory valuation is still an important criterion in the Bureau. In the year you swing to "direct costing" you cannot take your inventory write-down as a cost for tax purposes. The write-down has been made in some cases, but the same tax has been paid as would have been paid without the write-down.

This write-down can probably be best made as a surplus adjustment.

[6] See page 117 for an example of Volume Variance.

If the Treasury Department, credit grantors, *et al,* object to the basic cost accounting plan all of its advantages can be still enjoyed by simply putting a figure on the statement to cover the fixed or constant costs in relation to inventories. This figure can be continued until substantial changes in the amount occur.

In efforts to get approval of the basic cost accounting plan, it is possible that more difficulty will be experienced with the S.E.C. than the T.D. Because the fixed costs have to be reported several times a year on Form 10K, more work will be involved than in just an annual adjustment for the Treasury.

In connection with the P/V analysis under basic cost accounting, one marked advantage at the top managerial level is that the sales department better understands the relative contribution of each product class to the differential known as fixed costs and profit, *i.e.,* marginal income, because only the variable costs have been entirely identified with products instead of mixing the fixed and the variable costs. As a result, the sales department is not so apt to price products at lower figures than they should where costs are considered in relation to pricing policies.

Probably the most important initiatory matter under basic cost accounting is the selection of *product classes or divisions.* A product with a high fixed cost should not be in the same division as products with low fixed costs and averaged with the latter.

If management has been used to thinking of fixed costs in relation to a given product, the standard cost cards can be so constructed as to show on each card the *fixed* costs separated from the *variable* costs for each product or group. This can be continued during the transitional period and until the old methods are superseded by basic cost accounting.

A sales forecast by product classes by months for a year is multiplied by the P/V ratio for each unit for each month. When the total fixed is then substracted from the total profit contribution per month, the result is the budgeted net operating profit for each month. If this is not healthy, a revision of the Master Profit Plan needs to be made.

Under the direct costing plan or basic cost accounting method, whatever termed, there are possible savings in personal property taxes in the various states in which assessments are based on book valuations of the inventories located within the respective jurisdictions. In one company this practice has not been adopted nor is it endorsed by it, partially on the ground that the possible savings would not be sufficient to warrant a change in the valuation base for inventories.

Service Cost Centers Under Basic Cost Accounting. The general

procedure for handling the costs of service cost centers under the basic cost accounting plan will be illustrated by selecting one center, namely, Maintenance. A costing rate which includes only variable costs is predetermined. It is based on normal activity or some other capacity base. This rate is extended, that is, applied to the activity of the various departments (centers) served by the maintenance department. The sum is the budget allowance for variable costs for the maintenance department. To this is added the allowance for fixed or constant costs, and the result is the total current budget allowance for the maintenance department. This total is then matched with *actual* maintenance costs both by categories of expense and by departments served to obtain the performance of controllable variance of the maintenance department. Of course some work of this department may be capitalizable, and some may be done for outsiders. Such reliefs result in net maintenance.

The soundest opinion today is that a department should be charged with only its *own costs* on the ground that it can only *control* them and not the costs prorated to it. This question, however, is still in the controversial area.

Modern Statement Under Basic Cost Accounting. Under basic cost accounting the P. and L. statement shows totals and product divisions on the same page, as well as current period and year to date for both. From Net Sales is substracted the *Total Variable Cost of Sales at Standard.* This is not the conventional figure which includes only the manufacturing cost of sales. Besides this, it includes the variable portion of selling and advertising cost as a second category, and also the variable portion of administration expenses as a third category. A sales tax would be an example of the latter. The difference between Net Sales and Total Variable Cost at Standard is Profit Contribution at Standard. This expressed as a percent of Net Sales is the standard or planned Profit to Volume (P/V) Ratio. Next are listed the Variances from Standard which arise in connection with the variable costs, namely, direct labor and overhead variances, purchase price variance, and spoiled work (shrinkage) variances. These can be further broken down on Cost and Variance Sheets and work sheets.

The total of the foregoing variances when subtracted from Profit Contribution at Standard gives the Profit Contribution at Actual. This divided net sales reveals the actual profit to volume ratio. Then and only then are the *fixed costs* brought into the picture. The budgeted amount of the fixed costs *in toto* is entered. To it are applied the Variances on the Fixed Costs. The latter might arise due to such items as renting a new sales warehouse, executive bonuses, and changes in depreciation amounts.

Application of such variances gives Total Fixed Costs. This amount subtracted from Profit Contribution at Actual gives Operating Profit or Loss. It is expressed as a per cent of Net Sales. This type of statement does not show Income Taxes.

Under basic cost accounting control when the planned P/V's of the forecasted sales are matched with the actual P/V's, the difference is due among other things to sales volume. This variance then becomes much clearer than under conventional accounting. The reason as stated is the elimination of the old type of volume variance. To be sure, a sales revenue variance can be broken down into two variances, sales mix (volume) and sales price.

The *labor and expense variance*, as listed in the P & L statement, in relation to the *mixed accounts* are assumed to be *variance* on the *variable* portion of such accounts.

To illustrate:

Supervision at normal activity:	
Fixed portion	$1,000
Variable portion	500
Actual activity	110%
Current allowance:	
Fixed	$1,000
Variable 110% x $500	550
Total	$1,550
Actual expense of supervision	1,600
Variance—bad	$ —50

This bad variance of $50 is assumed to be a variance relating to the variable component of this mixed cost.

If this were not done, the point of the actual P/V on the Profit and Loss Statement would not be reached.

Putting the matter in another way, the variances for the three major types of costs must appear in the statement in order to get the actual P/V. These variances are:

1. Variances on the wholly or purely variables.
2. Variances on the mixed, which are combined with the variables.
3. Variances on the fixed (constant).

Under the basic cost accounting the two variances, extra allowances and performance (controllable) variances on a departmental basis add up to the total variance. Also, the fixed cost variance and the variable cost variance add up to the total variance for each department.

If the public accountant objects to not having fixed overhead in the inventories, a lump figure including all fixed overhead can be displayed as a segregated item.

While fixed costs are necessary to fill up your pipe line of inventories, thereafter the total costs are the same in magnitude irrespective of volume within at least a practical range of operations.

Some General Observations. Unless the various supervisors and executives willingly give their wholehearted support and cooperation to a budget and control program it will either fail or will not yield optimum results. The executive responsible for building a budget program should be a decidedly practical person. Unfortunately, too many accountants attempt to build and administer a budget purely from an accounting viewpoint. Invariably this results in a weak budget structure. It is weak because the accountant tries to tell experienced operating heads how to operate their departments. Naturally, this attitude places the supervisors on the defensive who can easily sabotage any such short-sighted approach. It is preferable to *lead* the supervisors in setting their budgets rather than to flatly tell them what they can and cannot do.

The first and indispensable step in the control of expenses is to make available adequate information as to what is included in charges to departments. Otherwise, department heads are severely handicapped, and lack incentive for control. Consequently, interest and enthusiasm lag, and the ability to control expenses suffers. Expenses should be segregated by departments and accounts in such a manner that each department should be charged with only those expenses for which it is *responsible,* or which it can *directly control.* The tendency to combine departments or accounts in the interest of assumed simplicity should be resisted. It is detrimental to intelligent expense control—it is false simplicity. There should be complete knowledge of the component parts which comprise total expenses instead of reducing varied and complex transactions and activities too greatly in terms of cost.

One good rule is to *avoid prorations wherever possible.* This practice eliminates controversial questions, secures the respect of supervisors with reference to the accuracy of their expense statements.

Another rule is to recognize special cases where an unexpected or unusual management decision results in an expense to a department for which the department head cannot fairly be considered responsible. It is better to charge such costs to that classification of general and administrative expense for which the management itself, rather than the individual department is responsible. This practice avoids the situation where a

department feels that it has been unfairly charged with expenses for which it is not responsible. The same principle should be followed in budgeting. But border-line cases will arise. The challenge of charges made to departments is a healthy sign.

Any budget procedure and control may become stereotyped. Principle and content should be emphasized rather than form. The positive aspect of the budget as a program of operation should be emphasized, rather than its negative aspect as a method of policing expenses.

The probability of accomplishing a budget program increases in direct proportion to the extent that group participation is broadened. Causes of deviations from the budgets are discussed in open meetings with department heads. This often results in correcting bad conditions before the department's operating plan is entirely disrupted. But there are rare instances where the personnel of a department including the department head himself, may not be capable of operating effectively. Then the budget man advises the management of this fact, and makes recommendations. In cases where the solution is not readily apparent, the budget man makes detailed studies of the operation of the department involved. Once the ineffectiveness is recognized, the answer may grow out of the study.

Conclusions drawn from monthly figures and mere averages for longer periods may be erroneous. For example, a table showing direct labor and indirect labor and the per cent of the latter to the former by months and the average for the period is not an adequate tool for the control of indirect labor of a department. For example, one month would seem to be the best, and another month the worst if the per cent of indirect labor to direct labor only is considered. Moreover, suppose the direct labor for a month were $1,000. Using the monthly average of 50 per cent if that be the average, it would seem that the indirect labor should be $500. But all of these conclusions would be incorrect because indirect labor does not *vary directly with* direct labor; it becomes greater percentagewise as the *rate of activity* decreases. This is due to the fact that indirect labor consists of both a fixed component and a variable component. In other words, indirect labor is a mixed cost. The amount of indirect labor per standard direct-labor hours in a cost center increases as the volume of activity in the center decreases.

I close with the note sounded at the beginning of this talk, namely, that in the control of overhead, many accountants do not make adequate use of the accounting and allied tools at their disposal. Mere distribution of overhead is not control of overhead.

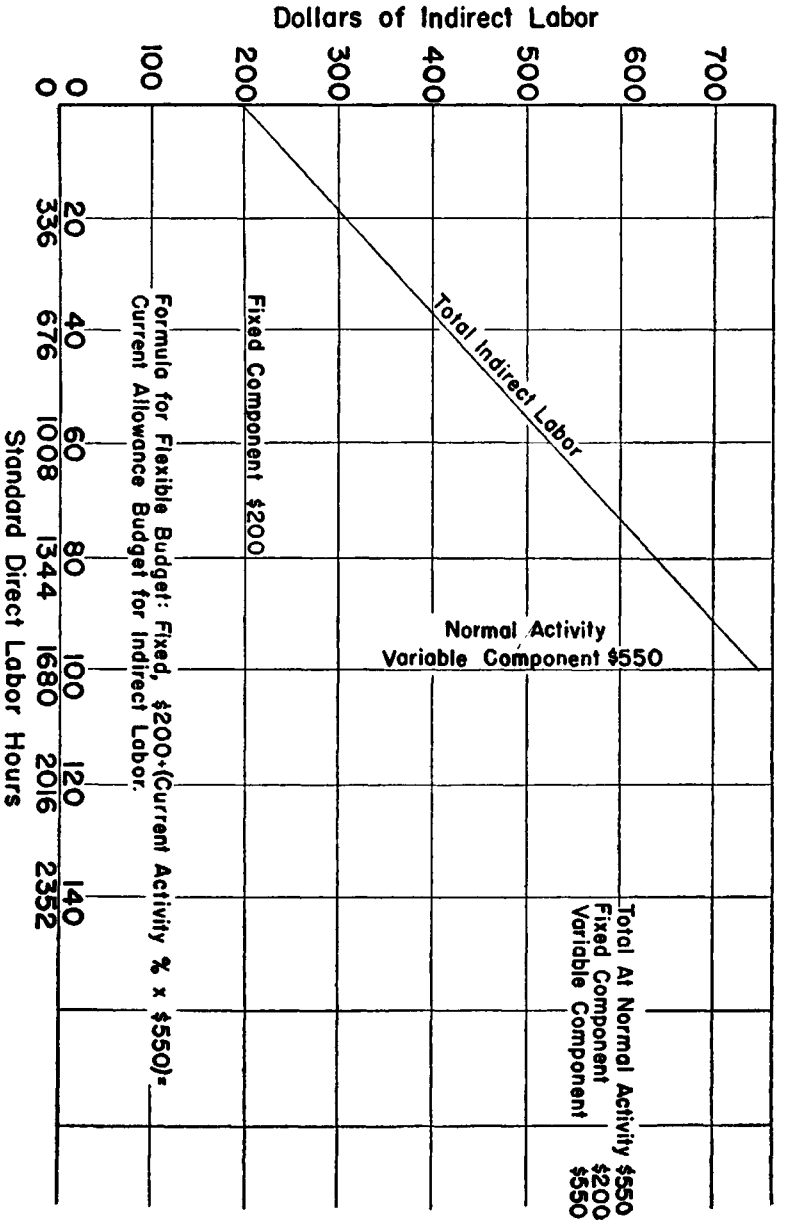
Dollars of Indirect Labor
0
100
200
300
400
500
600
700
Total Indirect Labor
Fixed Component $200
Normal Activity
Variable Component $550
Total At Normal Activity $550
Fixed Component $200
Variable Component $550
Formula for Flexible Budget: Fixed, $200+(Current Activity % x $550)=
Current Allowance Budget for Indirect Labor.
Standard Direct Labor Hours
0
20 336
40 676
60 1008
80 1344
100 1680
120 2016
140 2352

FIG. 1

1949 MASTER BUDGET OF AN OPERATING DEPARTMENT FOR ONE MONTH NORMAL ACTIVITY 7500 UNITS PER MONTH
REGARDED IN % AS 100%

Code No. of Account	Account Classification	Behavior (1)	Amount	Behavior Formula for Mixed Costs
	Direct Materials	V	3,275	
	Direct Labor	V	9,750	
	Salaries	F	5,000	
	Operating Supplies	V	120	
	Power	M	2,150	$150 Fixed + (% of Activity x $2000)
	Heat	M	1,050	$ 75 " + (" x $ 975)
	Depreciation	F	575	
	Insurance	F	650	
	Repairs—Labor	M	750	
	Repairs—Material	M	675	$ 50 " + (" x $ 700)
	Total		$23,995	$ 50 " + (" x $ 625)

$$\text{Standard Cost Per Unit} = \frac{\$23{,}995}{7500 \text{ units}} = \$3.20$$

(1) F means Fixed
V means Variable
M means Mixed
Latter have a fixed component and also a variable component.

FIG. 2

Cost and Variance Statement of an Operating Department

Variance		Account		Actual Year To Date	This Period			Calculations
This Period	Year to Date	Code No.	Name		Extra Budget Allowances	Current Budget Allowances	Actual	(These do not appear on statement)
$ 70 (2)			Direct Materials			$ 3,930 (1)	$ 4,000	Normal $3,275x120% = $ 3,930
500			Direct Labor			11,700	11,200	Normal $9,750x120% = $11,700
0			Salaries			5,000	5,000	Fixed At = 5,000
2			Operating Supplies			144	142	Normal $ 120x120% = 144
125 (2)			Power			2,550	2,675	Fixed $150 + (120% x $2,000) 2550
45			Heat			1,245	1,200	Fixed $75 + (120% x $975) = 1,245
0			Depreciation			575	575	Fixed At = 575
0			Insurance			650	650	Fixed At = 650
5			Repairs—Labor			890	885	Fixed $50 + (120% x $700 = 890
10 (2)			Repairs—Material			800	810	Fixed $50 + (120% x $625) = 800
$347						$27,484	$27,137	

(1) Current Allowances are Calculated to Nearest Dollar.
(2) Red Figures. These are Bad or Minus Variances.

A. Standard cost recovered (charged to inventory) 9,000 units of current activity x Standard Cost Per Unit ($320) = $28,800

B. Actual Cost = $27,137

C. Current budget allowances for current activity level of operations = $27,484

Total Variance ..... A—B = $28,800—$27,137 = $1,663 (Good or plus variance. Current activity more than absorbs actual cost).

Volume Variance ..... A–C = 28,800— 27,484 = 1,316 (Good or plus variance. Volume is more than enough to cover current allowances).

Performance Variance ..... C—B = 27,484— 27,137 = 347 Good or plus variance. Actual cost is less than current budget allowances).

$$\text{Current Activity } \% = \frac{\text{Actual In Units } (\$9,000)}{\text{Normal Activity In Units } (7,500)} = 120\%$$

Fig. 3

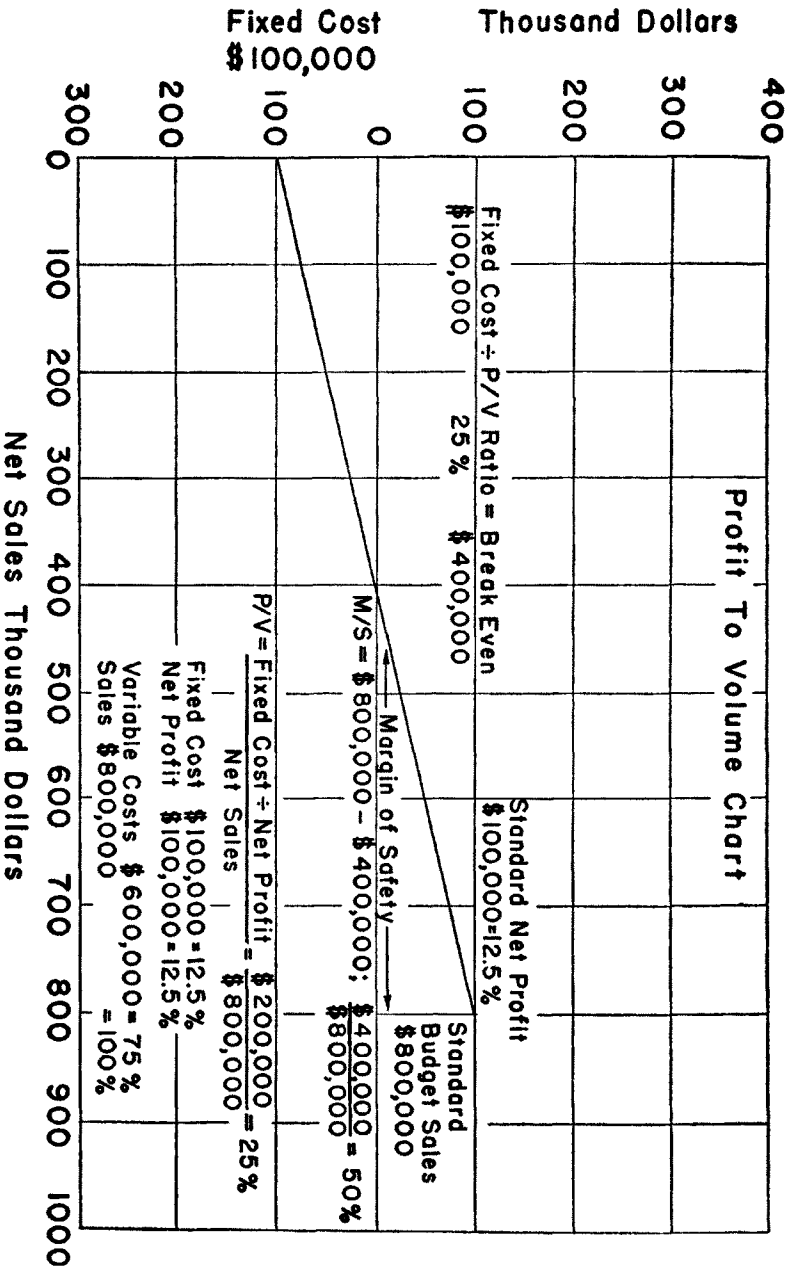
Profit To Volume Chart
Thousand Dollars
400
300
200
100
0
100
200
300
Fixed Cost
$100,000
Net Sales Thousand Dollars
0 100 200 300 400 500 600 700 800 900 1000
Fixed Cost ÷ P/V Ratio = Break Even
$100,000 25 % $400,000
Standard Net Profit
$100,000=12.5%
Standard
Budget Sales
$800,000
M/S = $800,000 - $400,000; $400,000 / $800,000 = 50%
Margin of Safety
P/V = Fixed Cost ÷ Net Profit = $200,000 / $800,000 = 25%
Net Sales
Fixed Cost $100,000 = 12.5%
Net Profit $100,000 = 12.5%
Variable Costs $600,000 = 75%
Sales $800,000 = 100%

FIG. 4

Fundamental Data	*1949*	*1950*
Sales Units	2,000	3,000
Production Units	4,000	1,000
Sales price per unit	$ 10	$ 10
Variable cost per unit	$ 5	$ 5
Fixed manufacturing overhead	$12,000	$12,000
Fixed manufacturing overhead (at standard) per product unit	$ 3	$ 3
Fixed Selling and Administrative Expenses	$ 2,000	$ 2,000

Calculation For 1949:

Cost of Production:		
4,000 units x variable cost per unit ($5)		$20,000
4,000 unit x fixed overhead per unit ($3 at standard)	$12,000	
Variance	0	
Fixed overhead at actual		12,000
Cost of production		$32,000
Less: Finished Goods Inventory, ending (2,000 units x $8)		16,000
Cost of Goods Sold (2,000 unit x $8)		$16,000

For 1950:

Cost of Production:		
1,000 units x variable cost per unit ($5)		$ 5,000
1,000 units x fixed overhead per unit ($3 at standard)	$ 3,000	
Variance (under-absorbed overhead)	$ 9,000	
Fixed overhead at actual		12,000
Cost of production		$17,000
Finished Goods Inventory, beginning ($2,000 x $8)		16,000
Total Finished Goods available for sale		$33,000
Finished Goods Inventory, ending		0
Cost of Goods Sold (3,000 unit) as adjusted by amount of $ 9,000		$33,000

NOTE: This $33,000 less $9,000 = $24,000 which is equal to 3,000 units sold @ $8 per unit.

Calculations under Assumption of Sales of 2500, not 3000 units in 1950

Cost of Production:		
1,000 units x $5		$ 5,000
1,000 units x $3	$ 3,000	
Variance	9,000	
Fixed overhead at actual		12,000
Cost of production		$17,000
Finished Goods Inventory at beginning (2,000 x $8)		16,000
Total Finished Goods available for sale		$33,000
Finished Goods Inventory, ending (500 x $8)		4,000
Cost of Goods Sold (2500 units) as adjusted		$29,000

NOTE: This $29,000 less $9,000 = $20,000 which is 2,500 unit sold x $8 per unit.

* It is assumed that no variances exist for Direct Material and Direct Labor.

FIG. 5

CONVENTIONAL PROFIT AND LOSS STATEMENT

	1949	1950	Change	Assuming Sales in 1950 of 2500, not 3000 units	1949	1950	Change
Sales (at $10)	$20,000	$30,000	+$10,000		$20,000	$25,000	+$5,000
Cost of Goods Sold (at $8)	16,000	24,000	+ 8,000		16,000	20,000	+ 4,000
Gross Margin	$ 4,000	$ 6,000	+$ 2,000		$ 4,000	$ 5,000	+$1,000
Under-absorbed overhead	0	(9,000)[1]	—(9,000)[1]		0	(9,000)[1]	—(9,000)[1]
Gross Profit	4,000	(3,000)[1]	—(7,000)[1]		4,000	(4,000)[1]	—(8,000)[1]
Selling & Adm. Expenses	2,000	2,000	0		2,000	2,000	0
Net Operating Profit	$ 2,000	(5,000)[1]	—(7,000)[1]		$ 2,000	—($6,000)[1]	—(8,000)[1]

Non-Convention Profit and Loss Statement — *Assuming Sales of 2500 units, not 3000 in 1950*

Sales @ $10	$20,000	$30,000	+$10,000	$20,000	$25,000	+$5,000
Cost of Sales at Variable Cost @ $5	10,000	15,000	+ 5,000	10,000	12,500	+ 2,500
Gross Margin	$10,000	$15,000	+$ 5,000	$10,000	$12,500	+$2,500
Fixed Manufacturing overhead	12,000	12,000	0	12,000	12,000	0
Gross Profit	(2,000)[1]	$ 3,000	+ 5,000	(2,000)[1]	$ 500	+$2,500
Selling & Adm. Expenses	2,000	2,000	0	2,000	2,000	0
Net Operating Profit	$4,000)[1]	1,000	+$ 5,000	($4,000)[1]	($1,500)[1]	+$2,500

[1] Red figures

FIG. 6

A PROGRAM FOR EFFECTIVE INTERNAL CONTROL

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I.

A starting point for a discussion of a program for effective internal control may well be what we mean by the term internal control. Actually, internal control is a term which means quite different things to different people. To some people it has a rather narrow meaning, more synonymous with fraud prevention. To others it carries a meaning of bookkeeping efficiency. Other people will view it more broadly as meaning the over-all efficiency of the finance function. Then there are still others who give it the broadest type of meaning and relate it to over-all internal efficiency of the business organization. Each approach has its particular points of merit but, for the time being, we may think of it as describing finance function efficiency, and later we will examine this concept in some greater detail.

Our initial understanding of internal control may also, perhaps, be somewhat further clarified by distinguishing internal control from internal check and internal auditing. In the past these terms have been used somewhat synonymously and interchangeably, although in the more recent literature, their separate meanings have been more clearly recognized.

Internal check is, of course, the narrower term. Properly used, this term should be applied to describing the characteristics of an accounting system which make for internal accuracy, efficiency of operation, and general integrity of the results. Internal auditing, on the other hand, as viewed by the leaders in this field, is something entirely apart from the accounting system in its regular operational sense, and which exists as an independent appraisal activity. In this connection many things frequently called auditing in a company are really part of the accounting system itself. Internal control, on the other hand, is the broadest term of all and refers to the over-all efficiency of the finance function. As such it includes both the accounting system itself and the internal auditing activity which is carried out independent of that accounting system.

Next I should like to examine briefly the question of who in the business organization has the responsibility for the development and maintenance of effective internal control. Under the specifications of the tentative

definition outlined above, the primary responsibility would appear to be that of the chief financial officer. The chief financial officer in a particular situation might bear the title of Vice-President—Finance, Controller, or Treasurer. This chief financial officer, in turn, to a considerable extent delegates this responsibility down through the officer who is the head of the accounting system. It is important, however, to recognize that matters of internal control involve procedures and activities which are partly accounting and partly of a general operational nature. Because of this fact, the joint responsibility for effective internal control rests with general management and involves operating personnel as well as those individuals engaged solely in accounting and financial activities. The internal auditor also has certain responsibilities in this area, although the responsibilities in his case are chiefly of an appraisal and advisory nature.

The opportunity for this latter type of contribution exists because of the technical qualifications of the internal auditing personnel and because of the detached organizational status of the internal auditor which enables him to view the other elements of the system of internal control in a more objective fashion.

Finally, the independent public accountant assumes also a kind of appraisal responsibility since his review of the system of internal control is an integral part of the examination which provides the basis for his independent professional opinion.

II.

With this rather preliminary background, next I should like to examine in somewhat more detail the underlying theory of effective internal control. As a starting point, we may well turn to the definition contained in the recent bulletin on internal control prepared by the American Institute of Accountants. This definition is:

> Internal control comprises the plan of organization and all of the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies.

You will notice that this definition is quite broad, especially with respect to its reference to the promotion of operational efficiency and encouraging of adherence to prescribed managerial policies. It is a rather far cry from the early definitions of internal control which emphasized fraud detection and prevention and the checking of the clerical accuracy of the bookkeeping—definitions, as a matter of fact, which were at one time sponsored by the American Institute. It is possible, however, that the current definition may go even too far in encompassing areas where the

accountant or finance man has rather limited control. For example, operational efficiency and prescribed managerial policies would normally include such matters as quality control, inspection of product, and general production activities—all of which matters are frequently somewhat beyond the control of the financial man in an organization. The definition of internal control might therefore be somewhat modified to make it more consistent with the concept of finance function efficiency which was previously proposed. I, therefore, suggest for consideration the following definition:

Internal control refers to the design and utilization of all of the means whereby, from a financial standpoint, management is enabled to most effectively safeguard the company's assets, administer the current operations, and plan for the future.

Let us turn next to a consideration of some of the more specific elements of effective internal control. In this connection I should like first to consider what we mean by basic principles of internal control. Actually, many of the so-called principles are really not principles at all. Thus, for example, the stipulation that one who receives cash should not have access to the related accounting records is really more a statement of preferred procedure to conform to a principle, rather than being a principle itself.

In my opinion, there is only one basic principle of internal control, and that is the principle of checks and balances. This means simply that one action process is checked, proved, restrained, or otherwise subjected to the influence of another action process operating independently of the first. This is, of course, a principle which can involve any kind of an action process and which can be applied at any organizational level and in a countless number of ways. At its lowest level the principle may be employed by a single individual—a bookkeeper let us say—when he adds the columns of a register and then cross-foots the totals of those columns to the total of a control column. At a somewhat higher level the principle is applied within a single department by having the work carried out by one employee automatically cross-checked by the work of a second employee operating in an independent manner and possibly with data flowing from an independent source. At a still higher level, the principle is applied as between departments, as for example, where the Receiving Department operates as a check on the activities of the Purchasing Department. A still broader type of illustration is the operation of the internal auditing department as a check and balance on the operations of the accounting departments.

At its highest level the principle is also applied on a broad functional basis. The legal function is, for example, a check and balance on the finance function, and the finance function a check on the sales function. When a large organization is decentralized, the activities of one division

serve as a check and balance on the other division, especially when the individual divisions have their own profit performance responsibilities. Another more general illustration which has always impressed me was a statement in one of the speeches of Mr. Sloan, Chairman of General Motors, that he regarded his proving ground as a check and balance on the efficiency of his engineering organization.

Once we recognize the foregoing broad principle of internal control, it follows that the development of effective internal control consists substantially in measuring and appraising the application of this principle to the various segments of the operations. However, as a basis for this measurement and appraisal we need guide posts which are more commonly referred to as standards. These standards enable one to judge the extent to which particular operations or procedures involve supplementary risks or possible reductions in inefficiency. The particular standards can be on a rather broad basis or with reference to special areas or activities.

Let us take, for example, the area of cash control. Here the standards of effective internal control would include such matters as the importance of separating the flow of cash receipts and cash disbursements, the desirability that all incoming cash receipts be deposited intact on a daily basis, and the necessity that a record of accountability be established at the earliest possible moment. These and other standards would, of course, all be subject to the test of the practicability of the cost involved in relation to the particular risks involved, the importance of efficiency, and the requirements of a given management.

Standards of the type previously described can also be applied to other areas which are not directly of an accounting nature but which are properly part of the finance control function. For example, in connection with the financial control of product design, the standards would include the need for developing a cost target consistent with the price at which the product will have to be sold in its established market. The standards would also include the importance of seeing to it that current design changes are reflected in revised cost estimates and then related to the cost target, and finally that proper action was taken to keep the design plans in line with the cost target.

Our consideration of the elements of effective internal control takes us next to what I call factors of attainment. By factors of attainment I mean certain broad techniques which provide the best setting for both the development of internal control standards and performance in accordance with such standards. The first of these factors is the development of an appropriate organizational plan. This organizational plan includes the dele-

gation and assignment of functions in such a manner that individuals know their responsibilities and are in a position to be able to carry them out. A good organizational plan would normally be expressed through published organizational charts and written manuals outlining the scope of responsibilities. Unless this is done, confusion is likely to result, accountability for performance undermined, and effective internal control thus made impossible.

A second important factor of attainment is the development of policies and procedures which recognize and comply with good internal control standards. Such policies and procedures should also be clearly stated in writing and be available to all through manuals. Much can be done also in the clearness of presentation of such policies and procedures and their effectiveness can be maximized through the use of flow chart techniques which more specifically identify the major internal control features.

Another important factor of attainment involves personnel since, in the last analysis, policies, procedures, and operations are carried out by people, and affected by the problems of human relations. This means in the first instance that individuals must be carefully selected, giving effect to the particular qualifications required for the needs to be satisfied. Secondly, the personnel must be properly trained, especially in those areas where the practices of the industry or the particular company are unique. Finally, there must be an adequate program of employee relations, including working conditions, employee benefits, and promotional programs.

A particularly important factor of attainment involves the aggressive follow-up of all indicated deficiencies in the system of internal control. In any normal business operation such deficiencies are continuously coming to light. The deficiencies, however, are not as significant in themselves as whether careful inquiry is made into their causes so that proper action can be taken to lay the groundwork for avoiding, insofar as it is practicable, their recurrence in the future.

Finally, I should like to mention again internal auditing as an important factor of attainment in connection with a system of effective internal control. When properly set up in an organization and staffed with competent individuals, the internal auditing group can be a major factor in appraising and developing recommendations for the improvement of the system of internal control. It is important to note, however, that the effectiveness of this particular factor, internal auditing, depends also upon management giving the activity the proper support and then following up in an aggressive manner the conclusions and recommendations developed by the internal auditing group.

III.

Up to this point we have dealt entirely with the theoretical aspects of internal control. We have defined it, discussed the underlying principle, and considered the factors of attainment. Now I should like to talk more directly of the application of these ideas to a particular business situation, my own company. From a long-run standpoint, our plan for the development of a program of effective internal control is the continuous study and application of the principle through standards and through recognition of the factors of attainment previously outlined. All of the procedures, policies, and organizational changes which are continuously being developed are, in each case, studied from the standpoint of effective internal control. The internal control features are, of course, only one of the considerations that exist in a particular case. However, our objective is to see that the internal control aspect is properly understood and considered, and that we achieve the highest standards practicable in each situation. Since this is a continuing program it is, of course, one that will never really be finished.

In addition to our continuing program described above, in the recent months we have carried out a special and supplementary type of program which may be of interest to you. The need for this special program came about through the development of some fraudulent activities in several of our parts depots. These particular events led all of us to feel that some special effort was warranted to alert the entire organization to internal control responsibilities, and to accelerate the development of basic internal control procedures and policies in our rather recently decentralized field operations.

Our first move was to develop in our accounting policies and systems department a set of training materials for use throughout our company. These materials as finally developed included:

1. A copy of the booklet on internal control prepared by the American Institute of Accountants.
2. A specially prepared memorandum dealing with the standards of Internal control as applied particularly to our company.
3. An agenda for two meetings which was to include both finance and management personnel and for two additional meetings of fiance personnel alone.
4. A check list on internal control features, specially designed to cover our company operations.
5. Nine flow charts showing representative Ford Motor Company internal control procedures in the major procedural areas. These charts were to be used by the field locations as a general guide basis for the preparation of similar charts covering their own activities in the same areas.

6. A time schedule covering the holding of the meetings and the submission of the charts, and reports summarizing the results achieved.

The special internal control program was then announced to company management through a communication of the Vice-President—Finance. At the same time, another communication was issued by the Vice-President —Industrial Relations who, in our company, is in charge of security and plant protection, referring to the previously announced internal control program and requesting the cooperation of the security and plant protection people. Subsequently, the training materials were transmitted to the field by the Central Controller's Office, and the program was thus established.

In the weeks following, the program proceeded according to plan. The meetings with plant management provided a means of reviewing in general the internal control problem and particularly the review of the internal control check list with respect especially to those matters where there was a joint financial and operational interest. The first meeting, according to the plan, was used to determine the nature of the problem and the existing deficiencies. The second meeting was then used for the purpose of reporting on action taken to correct the previously indicated deficiencies. The same approach applied in connection with the meetings which included only the finance personnel. The preparation of the flow charts served in this connection to force the individual location to determine specifically what it was doing in particular areas and to give visibility to deficiencies not previously recognized or properly understood. Opportunity was provided to correct the deficiencies indicated so that the flow charts as finally submitted by the field locations portrayed what that location considered to be proper internal control procedures, with the further representation that such procedures were now actually being followed at that location.

Under our decentralized plan of organization, the flow charts and the reports of the individual field locations were transmitted to divisional offices where the finance personnel at those offices then had the opportunity to review and appraise the materials received from the field locations. In those instances where the divisional personnel were not satisfied, further explanations were requested from the field locations or additional revisions were suggested. Finally, the division offices submitted these approved materials to the Central Controller's Office as their representation as to what they considered to be proper internal control procedures now in effect in the respective divisions. The Central Controller's Office then had the final opportunity to review these charts and reports and, if circumstances so warranted, to ask in turn the divisional personnel for further explanations or further consideration of particular features.

The result of the entire program appears to have been very worthwhile in every respect. Most important of all, it resulted in the field personnel being forced to deal directly in a more intelligent fashion with their own internal control problems. As you can well appreciate, the real solution of the problem is the application of the standards to the specific situation. No general prescription of principles or standards can accomplish the desired results unless they are studied in respect to the particular requirements of the individual operating situation.

Finally, before I leave the discussion of this particular program, I should like to add that the charts as submitted are now being used by our internal auditing group in their examinations as a basis for determining that the procedures as represented to exist at particular locations, are in fact being so carried out. We thus have a means of bringing again to the attention of the field locations the importance of their program for effective internal control.

IV.

A discussion of a program for effective internal control would not be complete without some consideration of the role played by the independent public accountant and the coordinating of such a role with that of the internal auditing group. I think by considering briefly the coordination problem, I can probably best outline the entire relationship of the independent public accountant to the system of internal control.

It is important in the first instance to recognize that the independent public accountant and the internal auditor have a common interest in the reliability of the financial data. This common interest, together with the fact that both types of personnel have a similar kind of technical training and a common professional language, provides an ideal setting for a program of effective coordination. At the same time, however, it is important to recognize that the outside auditor and internal auditor have certain primary interests which are bound to influence their manner and approach and over-all scope of their activities. The independent public accountant or outside auditor, as he is sometimes called, is engaged primarily—at least in the case of larger companies—to express his independent opinion with respect to the fairness of the financial statements. Accordingly, his major product is his independent opinion and he is therefore concerned primarily with the soundness of that opinion. It is natural in a particular case that he should be concerned with the responsibility he is assuming, the qualifications that must be taken, and the soundness of his professional reputation from the standpoint of the general public. The internal auditor, on the

other hand, is concerned primarily with the furtherance of the welfare of his company. He is more interested in the operating procedures and policies and the day-to-day operations, with a view to developing maximum efficiency and maximum legitimate profit for the company. These special interests are bound to affect the nature and scope of their individual professional activities.

In coordinating these two factors, there are certain basic principles which should be recognized. The first of these is that since internal auditing is a part of the total system of internal control, it must be subjected to tests by the outside auditor in the same way as any other phase of the system of internal control. Another important principle is that the two activities should be maintained as separate entities and not merged into one. This is to say that employees of the outside auditor should not work under the direction of the internal auditor and, on the other hand, employees of the internal auditor should not work directly under the supervision of the outside auditor. Another important principle is that the outside auditor should make no advance commitments as to what he will or will not audit. For example, he should not agree in advance that he will not examine accounts receivable because the internal auditor has carried out a particular program in this area.

The recognition of the common special interests and basic principles of coordination set out above provide the basis for a program of effective coordination. This effective coordination requires that there be complete disclosure by the internal auditor of all of his plans and of all of the work that he does. For example, copies of his reports should flow to, or be available to, the outside auditor. Similarly, the outside auditor should have complete access to the working papers of the internal auditor. While the outside auditor will not and should not disclose his own plan of operations to the internal auditor, he does, however, have the important obligation of giving adequate consideration to the work of the internal auditor. This is to say that as the internal auditor increases the scope and thoroughness of his internal auditing program, the outside auditor, as he satisfied himself of this increasing scope and the competence of the internal auditing personnel, should be able to restrict his program to more and more limited tests. As a result, the outside auditor will then be able to devote his time more effectively to other areas where his contribution can be made increasingly valuable. We, in our own company, have carried out a continuing program of coordination with our outside auditors that has proved to be most effective and beneficial to both auditing groups, as well as to the company as a whole.

V.

It is my hope that in the preceding comments some basis has been laid for a greater appreciation of the broad meaning of the so-called system of internal control. We have viewed it as finance function efficiency, examined its underlying principle, identified its application through the use of standards, and considered the related factors of attainment. Consideration has also been given to the relationship of the independent public accountant and the manner in which the two auditing activities can be coordinated to increase the effectiveness of the system of internal control. Some further insight perhaps has been made possible by the description of the way we have approached the problem in the Ford Motor Company.

Most of all, I should like to emphasize that, because of the broad nature of internal control, the development and maintenance of an adequate system of internal control is something which is a joint responsibility of all participating parties—management, the company's accounting and finance personnel, the internal auditing group, and the independent public accountant. It is something also that is not static but which is everchanging to adapt itself to the evolving needs of the business enterprise.

Then, also, as time goes on, we acquire better understandings of our problems and increased technical skill in dealing with them. Internal control is something which involves matters of good theory, but which must at the same time be adapted to the needs of the particular situation. Always it must involve consideration as to how much the protection costs and what is the proper balance between such cost and the risks involved. It is something which requires and deserves the best efforts of all of us, especially in this defense production period when the needs of management are greater than ever.

I suggest that each of us re-examine the problem as it relates to our own individual situation to see whether we are doing everything we should in serving this important management need. By working together I am certain we can make still further gains.

CONFERENCE ROSTER

ALBERSTADT, J. W., John Carroll University, Cleveland
ALLAN, MRS. W. G., Youngstown College, Youngstown
ALLISON, FRANCIS T., Keller, Kirschner, Martin & Clinger, Columbus
ANKERS, RAYMOND G., Lybrand, Ross Bros. & Montgomery, New York, N. Y.
AREND, CARL, Armco Steel Corp., Middletown
ASHMAN, GEORGE W., JR., Arthur Andersen & Co., Chicago, Illinois
ASSION, LEE T., The Buckeye Steel Castings Co., Columbus

BALDWIN, JESSE H., Columbus
BARNARD, JACK, Modern Welding Co., Inc., Owensboro, Ky.
BARSTOW, C. BYRON, Trout & Barstow, Dayton
BARSTOW, C. WELDEN, Trout & Barstow, Dayton
BATTELLE, G. K., Battelle & Battelle, Dayton
BATTELLE, GORDON S., Battelle & Battelle, Dayton
BATTELLE, L. G., Battelle & Battelle, Dayton
BEACHLER, OSCAR E., Mutual Federal Savings & Loan Association, Miamisburg
BEAGLE, CHAUNCEY M., Western Reserve University, Cleveland
BEAMER, ELMER G., Haskins & Sells, Cleveland
BEARD, PAUL H., The Specialty Papers Co., Dayton
BECHER, G. G., The Dayotn Power and Light Co., Dayton
BECK, CLIFFORD E., Keller, Kirschner, Martin & Clinger, Columbus
BECKERT, RALPH F., Ohio University, Athens
BEDFORD, NORTON M., Washington University, St. Louis, Missouri
BELL, DOYT E., The Bonney-Floyd Co., Columbus
BENDER, ROBERT L., Ernst & Ernst, Cleveland
BENNETT, HUGH M., Columbus
BERGMAN, RAYMOND, Trout & Barstow, Dayton
BERRY, HAROLD C., The National Cash Register, Dayton
BERWALD, SAMUEL H., Fenn College, Cleveland
BEVARD, DALE E., Owens-Corning Fiberglas Corp., Newark
BEVIS, DR. HOWARD L., The Ohio State University, Columbus
BEYER, HARMON W., Arthur C. Jahn & Co., Columbus
BIEBER, J. J., National Association of Manufacturers, Detroit, Michigan
BIEHN, O. L., Detergents, Inc., Columbus
BLANCH, EDWARD JAMES, Owens-Corning Fiberglas Corp., Newark
BOLAND, FRANK A., Keller, Kirschner, Martin & Clinger, Columbus
BOLAND, J. R., Bell Coal Co., Columbus
BOLON, DALLAS S., The Ohio State University, Columbus
BOOSINGER, ALBERT O., The Goodyear Tire & Rubber Co., Akron
BOWE, CLAYTON K., Omar, Inc., Columbus
BOWMAN, F. C., The Ohio Steel Foundry Co., Lima
BRASTED, F. KENNETH, National Association of Manufacturers, New York, N. Y.
BRILL, GEORGE A., The Thew Shovel Co., Lorain
BRILLIANT, ANNE S., Los Angeles, Calif.
BRINK, VICTOR Z., Ford Motor Co., Dearborn, Michigan

BROAD, SAMUEL J., Peat, Marwick, Mitchell & Co., New York, N. Y.
BROWN, REUBEN, The Hobart Mfg. Co., Troy
BUCCALO, JAMES N., Keller, Kirschner, Martin & Clinger, Columbus
BUCKENMYER, A. J., Surface Combustion Corp., Toledo
BUEHLER, R. A., The H. C. Godman Co., Columbus
BUMILLER, CARL L., Union Central Life Ins. Co., Cincinnati
BUNTING, EARL, National Association of Manufacturers, New York, N. Y.
BURKE, J. EDWARD, Lybrand, Ross Bros. & Montgomery, Chicago, Illinois
BURNHAM, WALTER C., The Ohio State University, Columbus

CAMERON, ROBERT VERNON, C. E. Hathaway, Columbus
CAMPBELL, LORNE P., Ashtabula
CAMPBELL, RONALD G., Trout & Barstow, Dayton
CARNEY, THOMAS A., Trout & Barstow, Dayton
CASE, HARRY N., Lybrand, Ross Bros. & Montgomery, New York, N. Y.
CAYIA, E. D., Inland Steel Co., Chicago, Illinois
CHRISMAN, J. JEWETT, Battelle & Battelle, Dayton
CHRISTIANSEN, I. K., John Carroll University, Cleveland
CLARK, C. P., The Julian & Kokenge Co., Columbus
CLINGER, RALPH H., Keller, Kirschner, Martin & Clinger, Columbus
COCHRAN, JACK, Touche, Niven, Bailey & Smart, Dayton
COE, ALVAN L., The Wartburg Press, Columbus
COE, ROBERT H., Wright-Patterson A.F.B., Dayton
COFFMAN, ROBERT J., The Ohio State University, Columbus
COMVERSE, I. M., Peat, Marwick, Mitchell & Co., Cleveland
CONLEY, R. S., Farm Bureau Mutual Auto Ins. Co., Columbus
CONWAY, W. F., Kent State University, Kent
COOKE, DR. GILBERT, Bowling Green State University, Bowling Green
COONEY, C. J., John Carroll University, Cleveland
COX, R. CARSON, JR., The Ohio State University, Columbus
CRABBE, D. E., Rempel Mfg., Inc., Akron
CRITES, DEAN, State Tax Dept., Columbus
CROWE, N. A., Touche, Niven, Bailey & Smart, Dayton
CURL, JOHN W., Keller, Kirschner, Martin & Clinger, Columbus
CUTHBERTSON, HARRY N., Arnold, Hawk & Cuthbertson, Dayton

DALTON, H. L., Konopak & Dalton, Toledo
DANIELS, GEORGE A., The Hydraulic Press Mfg. Co., Mt. Gilead
DAVIS, C. X., Battelle & Battelle, Dayton
DAVIS, GERALD B., Farm Bureau Ins. Cos., Columbus
DAVIS, J. BREWSTER, Ernst & Ernst, Columbus
DAWSON, ORA RAY, Dayton
DAY, LEWIS I., The Buckeye Steel Castings Co., Columbus
DEATON, R. M., The Borden Co., Columbus
DEETER, BYRON E., Leland S. Welty, Sandusky
DEIBEL, WILLIAM H., JR., Ernst & Ernst, Columbus
DEINHARDT, JOHN B., Keller, Kirschner, Martin & Clinger, Columbus
DENSMORE, L. E., Boston, Mass.

DeVitt, John H., Hammermill Paper Co., Erie, Pa.
Dickerson, T. M., Western Reserve University, Cleveland
Dickerson, William E., The Ohio State University, Columbus
Domigan, Horace W., The Ohio State University, Columbus
Dowdy, W. O., Deloitte, Plender, Griffiths & Co., Cincinnati
Drake, John F., Walthall and Drake, Cleveland
Driscoll, Phillip T., Ernst & Ernst, Columbus
Dudley, W. P., The Ohio Steel Foundry Co., Lima

Ebright, J. S., Detergents, Inc., Columbus
Eckelberry, George W., The Ohio State University, Columbus
Eckford, R. H., Neon products, Inc., Lima
Edwards, Harry R., D. B. Frampton & Co., Columbus
Eilers, A. Arthur, Keller, Kirschner, Martin & Clinger, Columbus
Elliott, James H., The Specialty Papers Co., Dayton
Ennis, William C., Gerlach & Co., Columbus
Erickson, Einar A., Uebel, Monroe & Faber, Cleveland
Erp, E. J., Touche, Niven, Bailey & Smart, Dayton

Fahrenback, John, Farm Bureau Mutual Auto Ins. Co., Columbus
Fairweather, D. H., The American Appraisal Co., Cleveland
Ferris, Charles W., Oglebay, Norton & Co., Cleveland
Fertig, Paul E., The Ohio State University, Columbus
Ficocella, Philip A., Keller, Kirschner, Martin & Clinger, Columbus
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Fishley, William S., The Sparta Ceramic Co., East Sparta
Fleig, Wilfred J. J., The Ohio State University, Columbus
Floyd, Robert L., Arthur Young & Co., Toledo
Folk, Paul B., Ohio Dept. of Taxation, Columbus
Ford, Ruth C., Keller, Kirschner, Martin & Clinger, Columbus
Forsythe, W. Guy, Keller, Kirschner, Martin & Clinger, Columbus
Foster, Paul M., Harrop Ceramic Service Co., Columbus
Fouse, Edwin L., The Denison Engineering Co., Columbus
Frandell, Cloye J., Sr., Wright-Patterson Air Force Base, Dayton
Fravert, Harry J. W., The Monarch Marking System Co., Dayton
Frickey, R. N., Pioneer Mutual Casualty Co., Columbus
Froebe, John A., Fenn College, Cleveland
Frye, Marion A., Cleveland
Furry, Virgil L., Columbus Coated Fabric Corp., Columbus

Gaa, Chas., University of Illinois, Urbana, Illinois
Gaier, Raymond H., Counts and Gaier, Springfield
Ganner, Thos. A., Price, Waterhouse & Co., New York, N. Y.
Garner, S. Paul, University of Alabama, Tuscaloosa, Alabama
Garrison, Don E., Miami University, Oxford
Gehler, Charles, Charles Gehler & Co., Cincinnati
Geis, Norwood C., University of Cincinnati, Cincinnati
George, R. Weldon, Summer & Co., Columbus
Getz, Homer, Armco Steel Corp., Middletown

GILLESPIE, WILLIAM H., Trout & Barstow, Dayton
GILLON, LOUISA, Battelle Memorial Institute, Columbus
GLENN, D. W., Ernst & Ernst, Columbus
GOINS, CLAYTON O., Arthur C. Jahn & Co., Columbus
GRAFF, F. W., John Carroll University, Cleveland
GRAHAM, BERL G., Gand & Cherrington, Cincinnati
GRAY, S. W., The Hoover Co., North Canton
GREER, HOWARD C., Kingan & Co., Indianapolis, Indiana
GRIFFITH, GLENN S., Roots Connersville Blower Corp., Connersville, Indiana
GUNNARSON, ARTHUR B., National Association of Cost Accountants

HACKETT, JOHN M., JR., Wright-Patterson Air Force Base, Dayton
HANNUM, N. E., Detergents, Inc., Columbus
HARBRECHT, ROBERT, Battelle Memorial Institute, Columbus
HARDESTY, ROBERT M., The Faultless Rubber Co., Ashland
HARN, PAUL H., The Lowe Brothers Co., Dayton
HARRIS, GOULD L., New York University, New York
HARRISON, LINCOLN J., Central State College, Wilberforce
HASSLER, R. H., Harvard Business School, Belmont, Mass.
HATCH, DOROTHY E., Marion A. Frye, Cleveland
HAYMAKER, RALPH L., Pretty Products, Inc., Coshocton
HECKERT, J. BROOKS, The Ohio State University, Columbus
HEINEMEYER, D. L., Miami University, Oxford
HENTON, KEITH T., Raymond Mfg. Co., Corry, Pa.
HEPWORTH, SAMUEL R., University of Michigan, Ann Arbor, Michigan
HICKS, ERNEST L., Arthur Young & Co., Toledo
HIGHFIELD, GRACE S., Keller, Kirschner, Martin & Clinger, Columbus
HILL, FREDERICK B., JR., Yardley Industries, Columbus
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